



City of Norfolk

Department of Public Works

NORFOLK, VIRGINIA

PARKDALE CHANNEL IMPROVEMENTS

INDEX OF SHEETS

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NOVEMBER 2015 SITE PLAN #15-0011

RESPONSIBLE LAND DISTURBER (RLD) DESIGNATION

THE FOLLOWING PERSON ROBERT HOPPER, III P.E.

(SIGN), IS IDENTIFIED AS THE RESPONSIBLE LAND DISTURBER WHO WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY. THIS PERSON MEETS THE APPLICABLE REQUIREMENTS OF VIRGINIA CODE SECTION 10.1-563 AND 10.1-566 BY VIRTUE OF THE FOLLOWING (CHECK THE CATEGORY THAT APPLIES):

- RESPONSIBLE LAND DISTURBER CERTIFICATE
- DCR CERTIFICATION FOR COMBINED ADMINISTRATOR, ADMINISTRATOR, PLAN REVIEWER, INSPECTOR, OR CONTRACTOR
- VA PROFESSIONAL ENGINEER, LAND SURVEYOR, LANDSCAPE ARCHITECT, OR ARCHITECT

RLD CONTACT INFORMATION

NAME: ROBERT HOPPER, III

CERTIFICATION/REGISTRATION NUMBER: Virginia P.E. / 0402052824

COMPANY: CDM SMITH

MAILING ADDRESS: 5400 Glenwood Ave Raleigh NC, 27615

TELEPHONE: 919-325-3500 FAX: (919) 781-5730

EMAIL: hopperrv@cdmsmith.com

THIS DESIGNATION MAY ONLY BE CHANGED BY A PLAN COVER SHEET REVISION THAT MUST BE SUBMITTED TO THE CITY FOR VERIFICATION AND APPROVAL.

UPON AWARD OF THE CONTRACT AND BEFORE ANY LAND DISTURBING ACTIVITY CAN BEGIN, THE CONTRACTOR SHALL EXECUTE AND SUBMIT A RESPONSIBLE LAND DISTURBER NOTIFICATION FORM TO THE DEPARTMENT OF PLANNING, ENVIRONMENTAL SERVICES, ROOM 508, CITY HALL BUILDING, 810 UNION STREET, NORFOLK, VA 23510 TEL: (757) 664-4368. AWARD OF THE CONTRACT WILL RELIEVE THE ABOVE SIGNER OF ALL RESPONSIBILITY.

SITE INFORMATION

THIS PROJECT IS DESIGNED TO RESTORE NATURAL STRUCTURE AND FUNCTION TO THE EXISTING URBAN STREAM CHANNEL AND FLOODPLAIN.

THE PROJECT SITE COVERS A CITY PARK PROPERTY AND INTERSECTS ADJACENT AREAS OF 4 PRIVATE DEVELOPED RESIDENTIAL PROPERTIES. TEMPORARY CONSTRUCTION EASEMENTS WILL BE OBTAINED FOR EACH OF THE RESIDENTIAL PROPERTIES PRIOR TO CONSTRUCTION.

PROPERTY OWNER	MULTIPLE
PROPERTY ADDRESSES:	
EAST KENMORE DRIVE	PIN 1437894636
7419 PARKDALE DRIVE	PIN 1439598020
7415 PARKDALE DRIVE	PIN 1439587897
7409 PARKDALE DRIVE	PIN 1439586891
298 SUBURBAN PKWY	PIN 1439586693
EXISTING LAND USE	RESIDENTIAL
ZONING	RESIDENTIAL
RIVER BASIN	LAFAYETTE RIVER
FLOOD ZONE	ZONE AE - 1% ANNUAL CHANCE

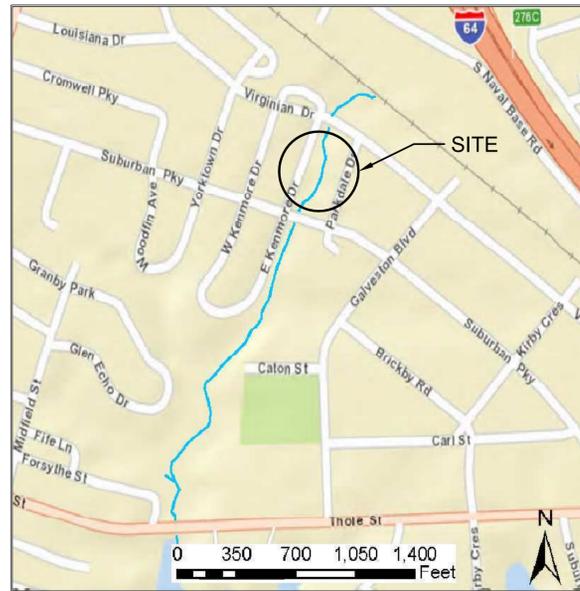
THIS SITE IS LOCATED WITHIN A CITY OF NORFOLK CBPA DESIGNATED INTENSELY DEVELOPED AREA (IDA).

LAND DISTURBANCE

TOTAL SITE AREA (5 PARCELS)	2.28 ACRES
PRE-DEVELOPMENT IMPERVIOUS AREA (ACRES,%)	N/A ACRES
POST DEVELOPMENT IMPERVIOUS AREA (ACRES,%)	N/A ACRES
AREA OF DISTURBANCE	1.23 ACRES

WATER QUALITY INFORMATION

OWNERSHIP OF THE IMPROVEMENT	CITY OF NORFOLK
TYPE OF IMPROVEMENT	NATURAL CHANNEL DESIGN
PROTOCOL 1 TREATMENT CREDIT	11.6 LB/YR
PROTOCOL 3 TREATMENT CREDIT	5.5 LB/YR
TOTAL TREATMENT CREDIT	17.1 LB/YR



VICINITY MAP

OWNER CONTACT INFORMATION

CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS
2233 MCKANN AVENUE
NORFOLK, VIRGINIA 23509
(757) 823-4021

NOTES:

- THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO ALL OWNERS AND RESIDENTS OF PROPERTY ON OR ADJACENT TO IMPROVEMENTS SITE, THIRTY (30) DAYS PRIOR TO THE COMMENCEMENT OF WORK, UNLESS OTHERWISE DIRECTED BY THE CITY. CONSTRUCTION WITHIN EASEMENT OR ON PUBLIC RIGHT-OF-WAY NECESSITATES NOTICE WHETHER ADJACENT TO OR LOCATED ON THE ADJOINING PROPERTY. FAILURE TO PROVIDE THE MINIMUM NOTIFICATION TIME WILL RESULT IN A SUSPENSION OF WORK. DOOR HANGERS MUST BE PLACED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND MUST INCLUDE A 24 HOUR CONTACT PHONE NUMBER FOR EMERGENCIES. UPDATES MUST BE PROVIDED TO RESIDENTS AND BUSINESSES ON A BI-WEEKLY OR MONTHLY BASIS FOR BUSINESS OR RESIDENTS WITHIN 100 FT OF THE CONSTRUCTION ZONE WHO WILL BE AFFECTED BY ACCESS RESTRICTIONS, NOISE, DIRT AND DUST, USE OF PROPERTY DIRECTLY ADJACENT TO THEM, ETC.
- CONTRACTOR IS TO INSTALL ALL UTILITIES TO THE TOLERANCE REQUIRED BY THE CITY OF NORFOLK AND AS SHOWN ON THESE PLANS, SPECIFICALLY: ALL STORM DRAINAGE SHALL BE INSTALLED TO WITHIN 0.10' (ONE TENTH OF A FOOT) OF THE ELEVATION SHOWN ON THE PLAN, OR AS SPECIFIED IN WRITING BY THE CITY.
- CONTRACTOR TO BE RESPONSIBLE FOR ALL CORRECTION COSTS (I.E. PLAN, REVISION, PHYSICAL CORRECTION, REPAIRS, REPLACEMENTS, RETROFITS, ETC.) REQUIRED AS A RESULT OF INSTALLATION NOT MEETING THE REQUIREMENT TOLERANCE.
- ALL MISS UTILITY MARKINGS IN THE RIGHT-OF-WAY ASSOCIATED WITH THE PROJECT ARE REQUIRED TO BE ERADICATED AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE CITY'S ROW EXCAVATION & RESTORATION MANUAL LOCATED AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW.ASP.
- THE CONTRACTOR TO CONTACT ENVIRONMENTAL STORM WATER MANAGEMENT AT (757) 823-4000 (48 HOURS NOTICE) FOR TIE-IN INSPECTION TO ANY OF CITY OF NORFOLK STORM WATER INFRASTRUCTURE.
- THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES AT 664-4368 AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY SO THAT LAND DISTURBING PERMIT CAN BE ISSUED AND A PRECONSTRUCTION CONFERENCE CAN BE SCHEDULED.
- CONTRACTOR IS REQUIRED TO IDENTIFY THE LAY DOWN/STORAGE AREA LOCATION AND SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN TO ENVIRONMENTAL SERVICES PRIOR TO WORK COMMENCING. CONTACT (757) 664-4363 FOR INFORMATION.
- CONTRACTOR SHALL OBTAIN RIGHT-OF-WAY PERMIT FROM CITY PUBLIC WORKS FOR CONSTRUCTION ACCESS AND REPLACEMENT OF GRANITE CURB AT (757) 664-4695.
- THIS SITE REQUIRES A VSPM GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS REQUIRED TO SECURE PERMIT COVERAGE FROM THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE REQUIRED BY THE PROJECT BY SUBMITTING A COMPLETE REGISTRATION STATEMENT AND PAYING THE APPROPRIATE PERMIT FEE TO THE CITY OF NORFOLK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING PERMIT COMPLIANCE DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO INSPECTIONS, SWPPP UPDATES, ETC. CONTACT NORFOLK ENVIRONMENTAL SERVICES AT (757) 664-4363 FOR FURTHER INFORMATION.

APPROVAL		
APPROVED DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT	SIGNATURE	DATE
APPROVED ENGINEERING MANAGER	SIGNATURE	DATE



CDM Smith Inc.
5700 Thurston Ave, Suite 102
Virginia Beach, VA 23455
Tel: (757) 318-9800

CITY OF NORFOLK STANDARD NOTES

- CONTRACTOR IS ENCOURAGED TO VISIT SITE PRIOR TO SUBMITTING BID.
- ELEVATIONS ARE BASED ON NAVD-88 (NORTH AMERICAN VERTICAL DATUM). BENCH MARKS ARE SHOWN ON SHEET C-1.
- FIELD ENGINEERING INFORMATION: ALL REQUESTS FOR INSPECTIONS, AND FIELD CONSTRUCTION INFORMATION SHOULD BE DIRECTED TO: CITY OF NORFOLK CHIEF OF CONSTRUCTION AT (757) 823-1013
- PRIOR TO THE SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PRELIMINARY DETAILED TRAFFIC CONTROL PLAN FOR REVIEW BY THE DIVISION OF TRAFFIC ENGINEERING, DEPARTMENT OF PUBLIC WORKS. THE TRAFFIC CONTROL PLAN AS WELL AS ALL TRAFFIC CONTROL DEVICES UTILIZED ON THE PROJECT MUST COMPLY WITH THE "FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS, FOLLOWING APPROVAL OF THE PLAN, A REPRODUCIBLE DRAWING SHALL BE SUBMITTED TO THE FIELD ENGINEERING OFFICE FOR USE AND DISTRIBUTION.
- SUBMITTALS ON MATERIALS FOR THIS PROJECT SHALL BE APPROVED BY THE FIELD ENGINEERING OFFICE PRIOR TO BEGINNING CONSTRUCTION.
- A CONSTRUCTION SCHEDULE SHALL BE SUBMITTED TO THE FIELD ENGINEERING OFFICE, AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
- ALL WORK WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF NORFOLK **RIGHT-OF-WAY EXCAVATION & RESTORATION MANUAL**, (ORDINANCE NO. 40,778), DEPT. OF PUBLIC WORKS, DIVISION OF TRANSPORTATION. THE DOCUMENT MAY BE DOWNLOADED AT <http://www.norfolk.gov/PublicWorks/>
- THERE MAY BE A C.B.D. TRAFFIC CONTROL SYSTEM IN THIS AREA. FOR PROTECTION OF THIS SYSTEM, PHONE THE PUBLIC WORKS DEPARTMENT BEFORE STARTING WORK: 664-7300
- CONTRACTOR SHALL CONFORM TO THE "OVERHEAD HIGH VOLTAGE ACT" (EFFECTIVE JULY 1, 1989) AND SHALL CONTACT THE NECESSARY AUTHORITIES PRIOR TO START OF CONSTRUCTION.
- THE DEPARTMENT OF PUBLIC WORKS WILL OBTAIN ALL NECESSARY TREE PERMITS. THE CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS OF THE "CITY OF NORFOLK TREE ORDINANCE" (EFFECTIVE FEBRUARY 15, 2005). CONTACT CITY FORESTER, RICHARD WERNICKE (757) 823-4024, TO ACQUIRE PERMIT FOR REMOVAL OF TREES. CONTRACTOR SHALL MAINTAIN TREE PERMIT ON-SITE AND CONDUCT AN ON-SITE MEETING WITH CITY FORESTER PRIOR TO TREE DEMOLITION.
- STATE LAW MANDATES THE NOTIFICATION OF UTILITY OWNERS 48 HOURS IN ADVANCE OF EXCAVATION. FOR LOCATION OF UTILITIES, CALL MISS UTILITY AT 1-800-552-7001 FOR: WATER & SEWER, H.R.S.D., VERIZON TELEPHONE, DOMINION VA. POWER, VIRGINIA NATURAL GAS, TRAFFIC CONTROLS, STORM DRAIN, COX CABLE T.V. ALL MISS UTILITY MARKINGS IN THE RIGHT-OF-WAY SHALL BE ERADICATED AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE CITY'S ROW EXCAVATION AND RESTORATION MANUAL.
- THE CONTRACTOR SHALL BE REQUIRED AND AGREES TO COMPLY WITH ALL THE PROVISIONS OF THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" (SECTION 56-265.14 et seq., CODE OF VIRGINIA, 1950, AS AMENDED) AND HEREBY AGREES TO HOLD THE CITY OF NORFOLK HARMLESS AGAINST ANY LOSS, DAMAGES, OR CLAIMS OF ANY NATURE WHATSOEVER ARISING OUT OF THE CONTRACTOR'S FAILURE TO SO COMPLY WITH THE REQUIREMENTS OF SAID ACT.
- CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE, ANY DAMAGE DONE TO THE UTILITIES SHALL BE IMMEDIATELY REPAIRED AT CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES SHOWN ARE BASED ON AVAILABLE RECORDS AND FIELD SURVEYS, AND IS NOT GUARANTEED TO BE EXACT OR COMPLETE. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN ADVANCE OF CONSTRUCTION.
- CONTRACTOR SHALL HAVE A SET OF PROJECT PLANS AND SPECIFICATIONS ON SITE AT ALL TIMES. IN ADDITION THE CONTRACTOR SHALL HAVE IN HIS POSSESSION THE CURRENT EDITION OF THE HRPDC SPECIFICATIONS.
- FOR WORK IN THE CITY OF NORFOLK RIGHT-OF-WAY, CONTACT 48 HOURS IN ADVANCE.

RIGHT-OF-WAY DIVISION (PERMITS)	(757) 664-7306
DIVISION OF TRANSPORTATION	(757) 664-7300
DIVISION OF ENVIRONMENTAL STORM WATER	(757) 823-4000
DEPARTMENT OF PARKS AND URBAN FORESTRY	(757) 823-4023
CONSTRUCTION PERMITS	(757) 664-6565

- THE CONTRACTOR SHALL REPLACE ALL DAMAGED OR REMOVED SIDEWALKS DAILY. THE TEMPORARY SIDEWALK SHALL BE A MINIMUM OF 1" COLD MIX OVER COMPACTED SUBGRADE AND SLOPED TO PROVIDE POSITIVE DRAINAGE. THE PERMANENT SIDEWALK REPLACEMENT SHALL BE IN ACCORDANCE WITH CURRENT CITY STANDARDS AND SHALL BE REPLACED TO THE NEAREST JOINT.
- THE CONTRACTOR SHALL NOTE THAT THERE MAY BE OTHER CONSTRUCTION IN THIS AREA. THE CONTRACTOR SHALL COOPERATE WITH THE CITY AND ANY OTHER CONTRACTOR OR UTILITY OWNER TO PREVENT DELAYS TO EITHER PROJECT.

CITY OF NORFOLK STANDARD EROSION AND SEDIMENT CONTROL NOTES

- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (3RD EDITION 1992) AND THE CITY OF NORFOLK EROSION AND SEDIMENT CONTROL ORDINANCE.
- THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES AT (757) 664-4368 AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITIES INCLUDING DEMOLITION, SO THAT A PRE-CONSTRUCTION CONFERENCE CAN BE HELD.
- THE CONTRACTOR SHALL APPLY PERMANENT OR TEMPORARY SOIL STABILIZATIONS TO ALL DENUDED OR DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO ANY DENUDED OR DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 14 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND CLEANUP OF SEDIMENTATION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE IMMEDIATELY.
- THE CONTRACTOR SHALL LIMIT SITE ACCESS BY CONSTRUCTION VEHICLES TO ENTRANCES PROTECTED BY A STONE CONSTRUCTION ENTRANCE (VESCH STANDARD & SPEC 3.02) OR AN APPROVED COMPARABLE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS ON A DAILY BASIS.
- STOCKPILES OF SOIL AND OTHER ERODIBLE MATERIALS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION FOR STOCKPILES ON SITE AS WELL AS FOR MATERIAL TRANSPORTED FROM THE PROJECT SITE.
- THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST INCLUDING (BUT NOT LIMITED TO) THE USE OF WATER, MULCH, OR CHEMICAL DUST ADHESIVES AND CONTROL OF CONSTRUCTION SITE TRAFFIC.
- EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAINAGE SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE PLAN APPROVING AUTHORITY.
- THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. AFTER STABILIZATION IS COMPLETE, ALL MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEEDED.

EROSION AND SEDIMENTATION CONTROL NARRATIVE

PROJECT DESCRIPTION

THE CONTRACT PLANS PROVIDE FOR CONSTRUCTION OF NEW OPEN WATER CHANNEL. THE PROJECT SITE IS A DRAINAGE CORRIDOR PARTIALLY ON CITY OWNED PROPERTY AND PARTIALLY ON MULTIPLE RESIDENTIAL PROPERTIES BETWEEN EAST KENMORE DRIVE AND PARKDALE DRIVE. THE EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE PUMP AROUND OF CLEAR WATER, PREVENTION OF SEDIMENT LADEN WATERS FROM DISCHARGING THROUGH THE DOWNSTREAM CULVERTS WITH ROCK INLET PROTECTION, AND ADDITION OF SILT FENCE AROUND THE PERIMETER OF STAGING AREAS. ALL WORK PERFORMED SHALL CONFORM TO THE LATEST VERSION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH, 3RD EDITION 1992) PROVIDED STANDARDS, CRITERIA AND GUIDELINES.

LAYDOWN AREAS - THE CONTRACTOR SHALL DETERMINE THE SUFFICIENCY OF THE AVAILABLE STAGING AND STOCKPILE AREA. SHOULD THE LAYDOWN AREA PROVE INSUFFICIENT FOR THE CONTRACTOR'S NEEDS, ADDITIONAL SPACE SHALL BE LOCATED, COORDINATED, AND PAID FOR AT THE CONTRACTOR'S EXPENSE WITH NO ADDITIONAL EXPENSE TO THE CITY.

CONTRACTOR SHALL PREPARE AND SUBMIT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO CITY OF NORFOLK ENVIRONMENTAL SERVICES THAT IS PREPARED IN ACCORDANCE WITH NPDES REGULATIONS. THE SWPPP SHALL BE MAINTAINED AT THE CONSTRUCTION SITE.

PROJECT SOIL TYPE AND WATER TABLE

SOIL TYPE: BOHICKET MUCK MAPPING UNIT
WATER TABLE: APPROXIMATE ELEVATION 0-2 FT NAVD88.

CRITICAL EROSION AREAS

THE WORK WILL BE CONDUCTED IN THE CHANNEL AND FLOODPLAIN WHEN DRAINED. IN THE EVENT THAT STORMWATER INFLOWS EXCEED THE CAPACITY OF THE PUMP AROUND DEWATERING PUMPS, EQUIPMENT WILL BE REMOVED FROM THE CHANNEL AND FLOWS WILL BE ALLOWED TO PASS. THE DOWNSTREAM TRIBUTARY TO WAYNE CREEK COULD EXPERIENCE SIGNIFICANT DEGRADATION IN THE EVENT SEDIMENT IS TRANSFERRED OFFSITE.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE NOTED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). THE MINIMUM STANDARDS SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

STRUCTURAL PRACTICES

UNLESS OTHERWISE NOTED, SEE PLAN SHEET C-1 FOR LOCATIONS OF STRUCTURAL AND C-4 FOR VEGETATIVE EROSION AND SEDIMENT CONTROL PRACTICES PROPOSED FOR THIS PROJECT.

- TEMPORARY CONSTRUCTION ENTRANCE - 3.02 A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE CONTRACTOR LAYDOWN AREA INTERSECTS IS SHOWN IN A MINIMALLY USED PARKING LOT. DURING MUDDY CONDITIONS DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING THE STREET.
- ROCK INLET PROTECTION - A RIPRAP AND STONE SEDIMENT BARRIER IN THE FORM OF A CHECK DAM IS TO BE INSTALLED NEAR THE INLET OF EXISTING DISCHARGE CULVERT WITH AN EXCAVATED VOLUME OF 240 CUBIC YARDS TO TRAP SEDIMENT FROM THE DISTURBANCE AREA AS SHOWN ON THE CONTRACT DRAWINGS.
- DEWATERING BAG - 3.26 A FILTER BAG IS TO BE PLACED WHEREVER SEDIMENT-LADEN WATER MUST BE REMOVED FROM THE SITE BY PUMPING.
- TREE PROTECTION - 3.38 A FENCE BARRIER IS TO BE PLACED AROUND TREES AND VEGETATED AREAS WHICH WILL NOT BE DISTURBED TO PROTECT THE TREES AND OTHER VEGETATION FROM CONSTRUCTION EQUIPMENT AND SOIL COMPACTION.

VEGETATIVE PRACTICE

- TEMPORARY SEEDING - 3.32 ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR 14 DAYS OR LONGER SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING COMPLETION OF GRADING.
- EROSION CONTROL BLANKETS - 3.36 OR MULCH 3.35 EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON MAINTAINED TURF AREAS AND FLAT AREAS GREATER THAN 20 FT FROM THE CONSTRUCTED CHANNEL AND WILL BE APPLIED AS A SECOND STEP IN SEEDING OPERATION.

MANAGEMENT STRATEGIES

- CONSTRUCTION SHALL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
- SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
- TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
- AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP AND REMOVED.

EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION

- INSTALL CONSTRUCTION FENCE AROUND LIMITS OF CONSTRUCTION AS SHOWN ON EXISTING SITE AND DEMOLITION PLAN C-1 AND DETAILS ON C-6.
- INSTALL CONSTRUCTION ENTRANCE FROM PUBLIC RIGHT OF WAY AS SHOWN ON C-1.
- DELINEATE STAGING AREA AND SURROUND WITH SEDIMENT FENCE.
- INSTALL TEMPORARY CHECK DAM IN FRONT OF EXISTING DOWNSTREAM CULVERTS AT SUBURBAN PARKWAY WITH 3 FT EXCAVATED DEPRESSION 3 FT DEEP IN EXISTING CHANNEL TO CAPTURE SEDIMENT UPSTREAM OF CHECK DAM.
- INSTALL PUMP AROUND FROM UPSTREAM OF WORK AREA TO DOWNSTREAM OF WORK AREA TO BYPASS CLEAN WATER AND ALLOW WORK IN THE DRY AS SHOWN ON C-1.
- INSTALL TEMPORARY STREAM CROSSING, SEDIMENT FENCE, AND BLOCK FLOW TO DEMOLITION AREA AS SHOWN ON C-1.
- DEMOLISH RETAINING WALLS AND FENCE AS SHOWN ON C-1.
- REMOVE TREES AND CLEAR AND GRUB AS SHOWN ON C-1 ONLY AS NECESSARY TO GRADE CHANNEL AND FLOODPLAIN.
- EXCAVATE AND GRADE CHANNEL AND FLOODPLAIN AS SHOWN ON PROPOSED GRADING PLAN C-2 AND SECTIONS ON C-3. PROPERLY DISPOSE OF EXCESS SOILS OFFSITE. INSTALL PERMANENT NATURAL FIBER MATTING ON STREAM BANKS.
- REPLACE FENCES ALONG RESIDENTIAL BACKYARDS AS SHOWN ON C-2.
- DISTURB ONLY 100 FT OF CHANNEL PER DAY BEGINNING AT UPSTREAM END AND STABILIZING WITH COIR FIBER MATTING AND SEEDING AT END OF WORK DAY.
- PROVIDE PERMANENT SEEDING WITH NATIVE VEGETATION AND TURF GRASS ACCORDING TO PLANTING PLAN ON C-4 AND DETAILS ON C-5 AND C-6. MULCH AND STABILIZE THE SITE AS AREAS COMPLETED.
- ONCE SITE STABILIZED, REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES COMPLETELY.

PERMANENT STABILIZATION

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING SHALL BE DONE IN ACCORDANCE WITH VESCH SPEC 3.32, PERMANENT SEEDING AND VIRGINIA EROSION AND SEDIMENT CONTROL TECHNICAL BULLETIN NO. 4 - NUTRIENT MANAGEMENT FOR DEVELOPMENT SITES. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER ALL NEW CHANNEL BANKS.

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- THE SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALFWAY TO THE TOP OF THE BARRIER.
- SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE RE-SEEDED AS NEEDED.
- THE SEDIMENT FILTER BAG WILL BE CHECKED REGULARLY TO ENSURE FUNCTIONALITY AND WILL BE CLEANED OUT/REPLACED IF ANY CLOGGING IS OCCURRING.
- ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED.

EXISTING CONDITIONS LEGEND

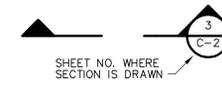
- 17.9 SPOT ELEVATION
- SMH SANITARY MANHOLE
- DI DRAINAGE INLET
- STORM PIPES
- TRAVERSE POINT
- TBM TEMPORARY BENCH MARK
- TREE
- SAPLING
- WATER VALVE
- W1-1 WETLAND FLAGS
- UNDERGROUND WATER
- ASPHALT SURFACE
- CHAINLINK FENCE
- TOB TOP OF BANK
- TOS TOE OF SLOPE
- BOS BOTTOM OF STRUCTURE
- RCP REINFORCED CONCRETE PIPE
- APPROXIMATE REGULATORY FLOODPLAIN BOUNDARY
- 1 FOOT INDEX CONTOUR SURVEYED
- 1 FOOT INTERMEDIATE CONTOUR SURVEYED
- WETLAND BOUNDARY

PROPOSED CONDITIONS LEGEND

- LIMITS OF CONSTRUCTION
- CHANNEL CENTERLINE
- CROSS SECTION
- TREE REMOVAL
- DEMOLITION
- TREE PROTECTION FENCE
- TREE ROOT PRUNING
- LOG VANE
- PROPOSED MINOR CONTOUR LINE AND ELEVATION DESIGNATION
- PROPOSED MAJOR CONTOUR LINE AND ELEVATION DESIGNATION



SYMBOL WHERE THERE IS A DETAIL

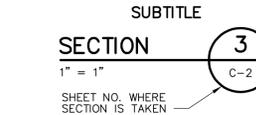


SYMBOL WHERE THERE IS A SECTION



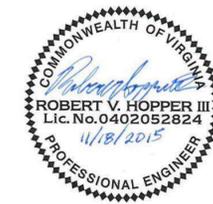
SYMBOL WHERE DETAIL IS DRAWN

DETAIL SYMBOL



SYMBOL WHERE SECTION IS DRAWN

SECTION SYMBOL



XREFs: [CDMS_2436] Images: [Va PE Seal Lic No 0402_0808HOPPER_0101]
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: M. BROKAW
 CROSS CHK'D BY: M. BROKAW
 APPROVED BY: R. HOPPER
 DATE: JUNE 2015



CITY OF NORFOLK, VIRGINIA
 DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

GENERAL NOTES AND LEGEND

PROJECT NO. 1589-100395
 FILE NAME: G001GNLGD.WG
 SHEET NO. G-1

CITY OF NORFOLK RIGHT-OF-WAY DIVISION STANDARD SITE PLAN NOTES

EXCAVATION AND RESTORATION IN THE RIGHT OF WAY:

- ALL WORK WITHIN THE RIGHT OF WAY SHALL COMPLY WITH THE CITY OF NORFOLK RIGHT OF WAY EXCAVATION & RESTORATION MANUAL, (ORDINANCE NO. 40,778), DEPARTMENT OF PUBLIC WORKS RIGHT-OF-WAY DIVISION. DOWNLOAD AT [HTTP://WWW.NORFOLK.GOV/DOCUMENTCENTER/VIEW/779](http://www.norfolk.gov/documentcenter/view/779). IT IS IMPORTANT THAT CONTRACTORS FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS OUTLINED IN THE MANUAL. FAILURE TO DO SO MAY IMPACT PROJECT COSTS. ALSO SEE "OTHER" IN THIS SECTION. EXCEPTIONS MAY BE PERMITTED. A REVIEW MEETING WITH RIGHT OF WAY IS REQUIRED. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- ALL WORK WITHIN THE RIGHT OF WAY SHALL COMPLY WITH THE CITY OF NORFOLK DESIGN STANDARDS. DOWNLOAD AT [HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=819](http://www.norfolk.gov/index.aspx?nid=819). EXCEPTIONS MAY BE PERMITTED. A REVIEW MEETING WITH RIGHT OF WAY IS REQUIRED. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- FLOWABLE FILL IS NOT AN APPROVED MATERIAL FOR USE IN THE CITY OF NORFOLK FOR BACKFILL WITHOUT PRIOR APPROVAL. THE SELECT MATERIAL AND 21A STONE WILL BE IN ACCORDANCE WITH THE 2002 VDOT ROAD AND BRID GE SPECIFICATIONS. FOR BACKFILL AROUND THE PIPE USE SELECT MATERIAL (SECTION 207) - TYPE 1 AND 20 CBR COMPACTION. FOR THE SUB BASE MATERIAL USE 6" MIN. VDOT 21A STONE IN ACCORDANCE TO SECTION 208.
- NEW DEVELOPMENTS, CONSTRUCTION, AND ADDITIONS REQUIRE NEW SIDEWALK, CURB, GUTTER, AND DRIVEWAYS. EXCEPTIONS MAY BE PERMITTED. A REVIEW MEETING WITH RIGHT OF WAY IS REQUIRED. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- IF APPROVED BY RIGHT-OF-WAY, WHEN THE CONTRACTORS WORK REQUIRES THE SAWCUTTING AND/OR PARTIAL DEMOLITION AND/OR REMOVAL OF ANY SECTION OF AN EXISTING APRON OR SIDEWALK. THE CONTRACTOR WILL BE REQUIRED TO REMOVE SAID EXISTING APRON OR SIDEWALK AND REPLACE IT WITH A NEW MONOLITHIC APRON OR SIDEWALK. SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT. ALL CONCRETE IS TO BE SAW CUT. NO PATCHING WILL BE ALLOWED. COMMERCIAL APRONS SHALL BE REPLACED WITH AN APPROVED COMMERCIAL APRON. RESIDENTIAL APRONS SHALL BE REPLACED WITH AN APPROVED RESIDENTIAL APRON (HS-207). SIDEWALKS SHALL BE REPLACED WITH AN APPROVED SIDEWALK DETAIL. CONTACT THE DIVISION OF RIGHT-OF-WAY FOR APPROVAL AT PWROW@NORFOLK.GOV (ORDINANCE NO. 40,778)
- UTILITY POLES MUST BE RELOCATED AT YOUR PROJECT'S COST. A COPY OF THE WORK ORDER FOR POLE RELOCATIONS MUST ACCOMPANY RIGHT-OF-WAY PERMITS.

PERMITS:

- A PERMIT AND INSPECTION IS REQUIRED TO PERFORM EXCAVATION AND INSTALLATION WORK OF ANY KIND IN THE RIGHT-OF-WAY. APPLICATIONS: [HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- A PERMIT AND INSPECTION IS REQUIRED TO SLOW, CLOSE, REDIRECT, DETOUR, OR ALTER VEHICULAR AND PEDESTRIAN TRAFFIC FOR ANY DURATION. APPLICATIONS: [HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- A PERMIT AND INSPECTION IS REQUIRED FOR LANE OR SIDEWALK CLOSURES FOR WORK WASHING, GRADING, OR INSTALLING ANY ITEM ABOVE OR UNDERGROUND. APPLICATIONS: [HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- A PERMIT AND INSPECTION IS REQUIRED TO PLACE ANY OBJECT IN THE CITY RIGHT-OF-WAY. APPLICATIONS: [HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- A PERMIT IS REQUIRED TO HAUL OVERSIZED, OVERWEIGHT, OR OVER HEIGHT LOADS. APPLICATIONS: [HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- A PERMIT AND INSPECTION ARE REQUIRED WHEN A NEW APRON AND/OR SIDEWALK IS INSTALLED, ALL NEW OR EXISTING UTILITY STRUCTURES SHALL BE INSTALLED AND/OR RELOCATED OUTSIDE THE AREA OF THE NEW APRON AND/OR SIDEWALK. APPLICATION: [WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- A PERMIT AND INSPECTION IS REQUIRED FOR TEMPORARY BULK WASTE CONTAINERS PLACED IN THE RIGHT OF WAY. IF THE CONTAINER IS PLACED ON PRIVATE PROPERTY A PERMIT FROM THE HEALTH DEPARTMENT IS REQUIRED.

FEES:

- CURRENT RIGHT OF WAY PERMIT FEES: [HTTP://WWW.NORFOLK.GOV/DOCUMENTCENTER/VIEW/789](http://www.norfolk.gov/documentcenter/view/789)
- EXEMPTION: CONTRACTORS PERFORMING WORK UNDER CONTRACT WITH THE CITY OF NORFOLK ARE EXEMPT FROM PERMIT FEES THROUGH JULY 1, 2014. EFFECTIVE JULY 1, 2014, CONTRACTORS PERFORMING WORK UNDER CONTRACT WITH THE CITY OF NORFOLK MUST PAY STREET, LANE, AND SIDEWALK CLOSURE FEES.
- EXEMPTION: CONTRACTORS PERFORMING WORK UNDER CONTRACT WITH VDOT ARE EXEMPT FROM ALL PERMIT FEES.

TRAFFIC CONTROL:

- ALL TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)", THE "VIRGINIA WORK AREA PROTECTION MANUAL" AND THE "CITY OF NORFOLK RIGHT OF WAY EXCAVATION AND RESTORATION MANUAL WHETHER IN EFFECT OR NOT AT THE TIME OF BID. ADDITIONAL CHARGES APPLY IF OFF-DUTY OFFICERS ARE REQUIRED. A LIST OF PERMIT FEES IS LOCATED AT [WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- FOR CONSTRUCTION IN OR ADJACENT TO ANY ARTERIAL AND/OR COLLECTOR STREETS REQUIRING TEMPORARY LANE OR STREET CLOSURE, THE CONTRACTOR MUST SCHEDULE A MEETING WITH THE CITY'S TRAFFIC MITIGATION TEAM. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.

- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED TRAFFIC CONTROL PLAN (MOT) WITH THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT-OF-WAY AT LEAST 14 DAYS IN ADVANCE OF THE START DATE. THE MOT SHALL BE A DRAWING OR AERIAL PHOTO WITH SITE SPECIFIC DETAILS. THESE SHALL INCLUDE BUT ARE NOT LIMITED TO: TRAFFIC SIGNS, DIRECTIONAL SIGNS, DESTINATION SIGNAGE, CHANNELIZING DEVICES, WATER-FILLED BARRIERS, PORTABLE MESSAGE BOARDS WITH MESSAGES TO BE DISPLAYED AND TIMES AND DURATIONS OF DISPLAYED MESSAGES. ADDITIONALLY THE MOT SHALL DISPLAY THE EXACT LOCATION OF ALL SIGNS AND/OR DEVICES INCLUDING SPACING FOR EACH SIGN AND/OR DEVICE, SPACING BEING APPROPRIATE FOR THE WORK ZONE LOCATION AND POSTED SPEED LIMITS. ALL MAINTENANCE OF TRAFFIC (MOT) PLANS SHALL CONFORM TO THE CURRENT ISSUE OF "THE VIRGINIA WORK AREA PROTECTION MANUAL" COPIES OR REPRODUCTIONS OF STANDARD VWAPM TTC PLANS MAY NOT BE SUFFICIENT. CONTRACTORS SHOULD CONSIDER THESE ITEMS WHEN BIDDING FOR CONSTRUCTION AS IT MAY AFFECT COSTS.
- NORFOLK POLICE REQUIRES OFF-DUTY OFFICERS FOR TRAFFIC CONTROL IN ANY SIGNALIZED INTERSECTION AND AS REQUIRED BY PERMIT. OFF-DUTY OFFICERS ARE INDEPENDENT CONTRACTORS. THE COST FOR OFF-DUTY OFFICERS IS A CONTRACTOR/OWNER RESPONSIBILITY.

BONDS:

- THE CONTRACTOR, OWNER, OR DEVELOPER WILL BE REQUIRED TO POST A CASH, CHECK, OR SURETY BOND OR LETTER OF CREDIT TO EXCAVATE IN THE RIGHT OF WAY. DOWNLOAD THE FORM: [HTTP://WWW.NORFOLK.GOV/DOCUMENTCENTER/VIEW/1406](http://www.norfolk.gov/documentcenter/view/1406)
- BOND AMOUNT MUST INCLUDE 100% TOTAL COST OF ROW INSTALLATION INCLUDING STREETLIGHTS, WATER, SEWER, STORM, B.M.P.S, ROADWAY, SIDEWALK, CURB, GUTTER. AN ADDITIONAL AMOUNT MAY BE SET AT THE DISCRETION OF THE DIRECTOR OF PUBLIC WORKS AND/OR ROW MANAGER.
- BOND WILL BE REDUCED DOWN TO 10% FROM THE DATE OF FINAL INSPECTION FOR A 2 YEAR WARRANTY TERM. A SEPARATE WARRANTY BOND IS ACCEPTABLE IN LIEU OF A BOND REDUCTION. A LETTER REQUESTING RELEASE OR REDUCTION MUST BE SENT TO THE RIGHT OF WAY PERMITS OFFICE VIA E-MAIL AT PWROW@NORFOLK.GOV

NOTES TO CITY A/E DESIGNERS AND CONTRACTORS:

- ALL CITY PROJECTS CANNOT BE BID UNTIL UTILITIES ARE RELOCATED OR ARRANGEMENTS HAVE BEEN COORDINATED BY THE CITY'S PROJECT MANAGER, A/E, AND RIGHT OF WAY DIVISION. PLEASE PROVIDE A LIST AND DRAWINGS OF ALL UTILITIES NEEDING RELOCATION TO RIGHT-OF-WAY DIVISION AT OR BEFORE 30% SUBMITTAL.
- PROJECT DESIGNERS MUST INCLUDE A DETAILED TRAFFIC CONTROL PLAN FOR UTILITY WORK WITHIN THE RIGHT-OF-WAY IN THE PLANS. FOR CONSTRUCTION IN OR ADJACENT TO ANY ARTERIAL AND/OR COLLECTOR STREETS AS DEFINED IN THE VIRGINIA WORK AREA PROTECTION MANUAL REQUIRING TEMPORARY LANE OR STREET CLOSURE, THE CONTRACTOR MUST SCHEDULE A MEETING WITH THE CITY'S TRAFFIC MITIGATION TEAM. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- OTHER:
- DETAILED STAMPED DRAWINGS FOR SHORING AND SCAFFOLDING WILL BE REQUIRED AS PART OF THE RIGHT-OF-WAY PERMIT PROCESS.
- ANY EXCAVATION IN THE ROADWAY MUST BE PATCHED WITH ASPHALT. STONE IS NOT ACCEPTABLE.
- FULL CURB TO CURB RESURFACING WILL BE REQUIRED IF ROADWAY PORTION IS CUT WITHIN THE FIRST 5 YEARS AFTER RESURFACING. AN ADMINISTRATIVE FEE OF \$500 WILL BE ASSESSED IN ACCORDANCE WITH CITY CODE.
- AS PART OF THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT OF WAY, THE CONTRACTOR MUST SUBMIT A MAP IDENTIFYING THE PROJECTS STORAGE AND LAY DOWN AREA. THE CITY DOES NOT ALLOW STORAGE, STAGING OR LAY DOWN AREAS WITHIN THE RIGHT OF WAY. CONTRACTORS ARE ENCOURAGED TO MAKE ARRANGEMENTS TO STORE MATERIALS AND LAY DOWN ON PRIVATE PROPERTY OR THEY MUST BE STORED WITHIN CONSTRUCTION SITE.
- ALL MISS UTILITY MARKINGS IN THE RIGHT-OF-WAY ARE REQUIRED TO BE ERADICATED AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE CITY'S ROW EXCAVATION & RESTORATION MANUAL LOCATED AT [WWW.NORFOLK.GOV/INDEX.ASPX?NID=362](http://www.norfolk.gov/index.aspx?nid=362)
- DESIGNERS ARE RESPONSIBLE TO CHECK IN-FIELD GRADES AND TO CONSULT WITH THE PROPER CITY OF NORFOLK STAFF IF THERE ARE QUESTIONS OR CONCERNS. DESIGNERS MUST SUBMIT A NOTICE VIA EMAIL TO THE RIGHT-OF-WAY DIVISION AT PWROW@NORFOLK.GOV VERIFYING THAT GRADES HAVE BEEN CHECKED AND ARE CORRECT.
- A CONSTRUCTION FENCE MAY BE REQUIRED FOR YOUR SITE. IN DOWNTOWN, CONCRETE BARRIERS AND WOOD PANELS ARE REQUIRED IN MOST CASES. IN SOME CASES, CHAIN LINK FENCE IS ACCEPTABLE. A REVIEW BY RIGHT OF WAY IS REQUIRED TO DETERMINE THE TYPE OF FENCE. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV

NOTIFICATIONS:

- NOTIFICATION MUST BE APPROACHED FROM 3 LEVELS OR TIERS FOCUSING ON THOSE AFFECTED BY THE CONSTRUCTION. CONTRACTORS AND/OR PROJECT SPONSOR WILL BE REQUIRED TO NOTIFY RESIDENTS AND BUSINESSES IN THE IMMEDIATE AREA THAT WILL BE AFFECTED BY THE CONSTRUCTION. DOOR HANGERS MUST BE PLACED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND MUST INCLUDE A 24 HOUR CONTACT PHONE NUMBER FOR EMERGENCIES. UPDATES MUST BE PROVIDED TO RESIDENTS AND BUSINESSES ON A BI-WEEKLY OR MONTHLY BASIS DEPENDING ON THE FOLLOWING:
 - IMMEDIATE IMPACT - BUSINESS OR RESIDENTS WITHIN THE CONSTRUCTION ZONE WHO WILL BE AFFECTED BY ACCESS RESTRICTIONS, NOISE, DIRT AND DUST, USE OF PROPERTY DIRECTLY ADJACENT TO THEM, ETC.
 - AREA IMPACT - THOSE WHO TRAVEL THROUGH OR WILL BE DETOURED AROUND LOCAL OR COLLECTOR STREETS, AFFECTED BY CONSTRUCTION INCLUDING CIVIC LEAGUES, BUSINESS ASSOCIATIONS AND PROPERTY OWNERS.
 - CITYWIDE IMPACT - THOSE WHO ARE AFFECTED BY VEHICULAR OR PEDESTRIAN ACCESS ON ARTERIAL STREETS OR IN BUSINESS OR OTHER PUBLIC ACTIVITY AREAS (SCHOOLS, UNIVERSITIES, GOVERNMENT FACILITIES, ETC.)

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REV. NO.	DATE	DRWN	CHKD	REMARKS

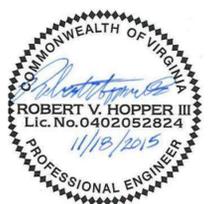
DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: M. BROKAW
 CROSS CHK'D BY: _____
 APPROVED BY: R. HOPPER
 DATE: AUGUST 2015



CITY OF NORFOLK, VIRGINIA
 DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

GENERAL NOTES AND LEGEND

PROJECT NO. 1589-100395
 FILE NAME: G002GNLG.DWG
 SHEET NO.
G-2



PARKDALE DRIVE
(60' R/W)

VIRGINIAN DRIVE
(60' R/W)

SUBURBAN PARKWAY
(60' R/W)

NOW OR FORMERLY
FALKNER PROPERTIES, L.L.C.
INST# 120008998
M.B. 23, PG. 23
GPIN# 1439598020
7419 PARKDALE DRIVE

1-STY. BRICK
#7419
FFE=10.7±

NOW OR FORMERLY
LEAH T. ROBINSON
INST# 100007206
M.B. 23, PG. 23
GPIN# 1439587897
7415 PARKDALE DRIVE

2-STY. BRICK
#7415
FFE=13.77

NOW OR FORMERLY
**CHRISTOPHER R. BUTLER
KATRINA M. BUTLER**
INST# 060030942
M.B. 23, PG. 23
GPIN# 1439586891
7409 PARKDALE DRIVE

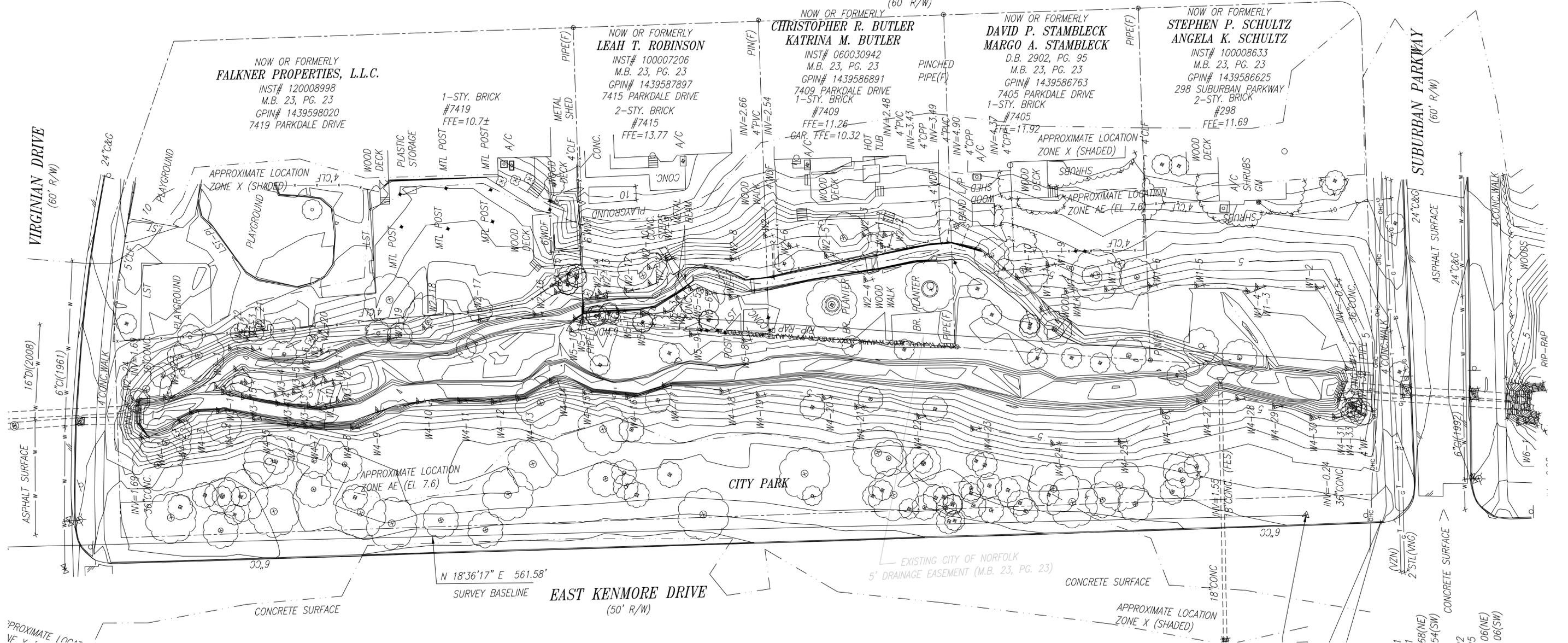
1-STY. BRICK
#7409
FFE=11.26

NOW OR FORMERLY
**DAVID P. STAMBLECK
MARGO A. STAMBLECK**
D.B. 2902, PG. 95
M.B. 23, PG. 23
GPIN# 1439586763
7405 PARKDALE DRIVE

1-STY. BRICK
#7405
FFE=11.92

NOW OR FORMERLY
**STEPHEN P. SCHULTZ
ANGELA K. SCHULTZ**
INST# 100008633
M.B. 23, PG. 23
GPIN# 1439586625
298 SUBURBAN PARKWAY

2-STY. BRICK
#298
FFE=11.69



TOPOGRAPHIC SURVEY FOR THE PARKDALE CHANNEL IMPROVEMENTS PROJECT
NORFOLK, VIRGINIA

SCALE: 1" = 30'
PMI PROJECT #12-031-02

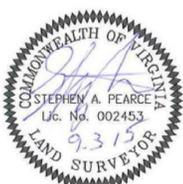
SITE PLAN
PLAN
1" = 20'

EXISTING CONDITIONS LEGEND

- 11.9 SPOT ELEVATION
- SMH SANITARY MANHOLE
- DI DRAINAGE INLET
- STORM PIPE
- TRAVERSE POINT
- TBM TEMPORARY BENCH MARK
- TREE
- SAPLING
- WATER VALVE
- W1-1 WETLAND FLAG
- W UNDERGROUND WATER
- A ASPHALT SURFACE
- X CHAINLINK FENCE
- TOB TOP OF BANK
- TOS TOE OF SLOPE
- BOS BOTTOM OF STRUCTURE
- RCP REINFORCED CONCRETE PIPE
- APPROXIMATE FLOOD ZONE BOUNDARY
- 5 1 FOOT INDEX CONTOUR SURVEYED
- 1/2 1/2 FOOT INTERMEDIATE CONTOUR SURVEYED

- SURVEY NOTES:**
1. THE MERIDIAN SOURCE OF THIS TOPOGRAPHIC SURVEY IS BASED ON THE VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983(93)HARN. THE PROJECT MERIDIAN WAS ESTABLISHED USING GPS METHODS AND WAS INITIATED AT CITY CONTROL MONUMENTS #GPS048, #GPS089 & #GPS132.
 2. ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)(92)(CITY OF NORFOLK 2000) AND WERE ESTABLISHED USING FIELD LEVELING METHODS INITIATED AT CITY VERTICAL CONTROL MONUMENT #CN023.
 3. THIS SURVEY WAS PREPARED TO SHOW EXISTING FEATURES AS OF DECEMBER 2012 AND DOES NOT CERTIFY TO CHANGES TO SITE CONDITIONS WHICH OCCUR SUBSEQUENT TO THIS DATE AND OR TO PROPOSED IMPROVEMENTS.
 4. THIS PROPERTY APPEARS TO BE IN ZONE X(SHADED) AND AE(EL7.6) REFERENCE: FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL NUMBER 5101040060F, MAP REVISED SEPTEMBER 2, 2009.
 5. THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY NOR A SUBDIVISION OF LAND.
 6. PROPERTY AND RIGHT-OF-WAY LINES ARE DEPICTED FOR GRAPHIC PURPOSES ONLY AND DO NOT REPRESENT A BOUNDARY SURVEY NOR A SUBDIVISION OF LAND. THE PROPERTY AND RIGHT-OF-WAY BEARINGS AND DISTANCES ARE NOT DEPICTED ON THIS TOPOGRAPHIC SURVEY BECAUSE THEY ARE A COMPILATION OF DEEDS AND PLATS WHICH HAVE BEEN SCALED, TRANSLATED AND ROTATED TO FIT INTO THE PROJECT DATUM.
 7. THIS SURVEY DOES NOT INTEND TO DEPICT ANY WETLANDS, HAZARDOUS WASTE AND ENVIRONMENTAL FEATURES THAT MAY AFFECT SAID PROPERTY SHOWN HEREON EXCEPT AS SHOWN.
 8. PIPE MATERIAL TYPES ARE DETERMINED BY FIELD OBSERVATIONS TO THE BEST OF OUR ABILITY. PMI DOES NOT WARRANT THE MATERIAL TYPE OF PIPES LOCATED IN CONFINED OR INACCESSIBLE SPACES.
 9. THE UNDERGROUND UTILITIES SHOWN, IF ANY, ARE BASED ON AVAILABLE PLANS OF RECORD AND HAVE BEEN DESIGNATED BY "MISS UTILITY" DESIGN TICKET #B232400785 AND THE PAINT DESIGNATION LINES HAVE BEEN LOCATED IN THE FIELD. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THE SURVEYOR FURTHER NOTIFIES ALL PARTIES THAT VIRGINIA LAW REQUIRES MISS-UTILITY TO BE CONTACTED PRIOR TO ANY EXCAVATION.
 10. THE TOPOGRAPHY AND PHYSICAL FEATURES SHOWN ON THIS MAP WERE OBTAINED UNDER THE DIRECT AND RESPONSIBLE CHARGE AND SUPERVISION OF STEVE PEARCE, L.S. THIS TOPOGRAPHIC SURVEY MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
 11. THIS TOPOGRAPHIC SURVEY WAS PREPARED/COMPILED BY:

PRECISION MEASUREMENTS, INC.
SURVEYORS - GPS - GIS - MAPPING - 3-D LASER SCANNING
851 SEAHAWK CIRCLE, SUITE 103
VIRGINIA BEACH, VIRGINIA 23452
(757) 368-0945
WWW.PRECISIONMEASUREMENTS.COM
VIRGINIA BEACH - NEWPORT NEWS - RICHMOND - CHANTILLY, VIRGINIA



XREFS: [CDMS_2436, RC01STPL, RC03STPL, RC06GPP] Images: [VA PE Seal Lic No 0402_ROBHOPPER.jpg]
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REV. NO.	DATE	DRWN	CHKD	REMARKS

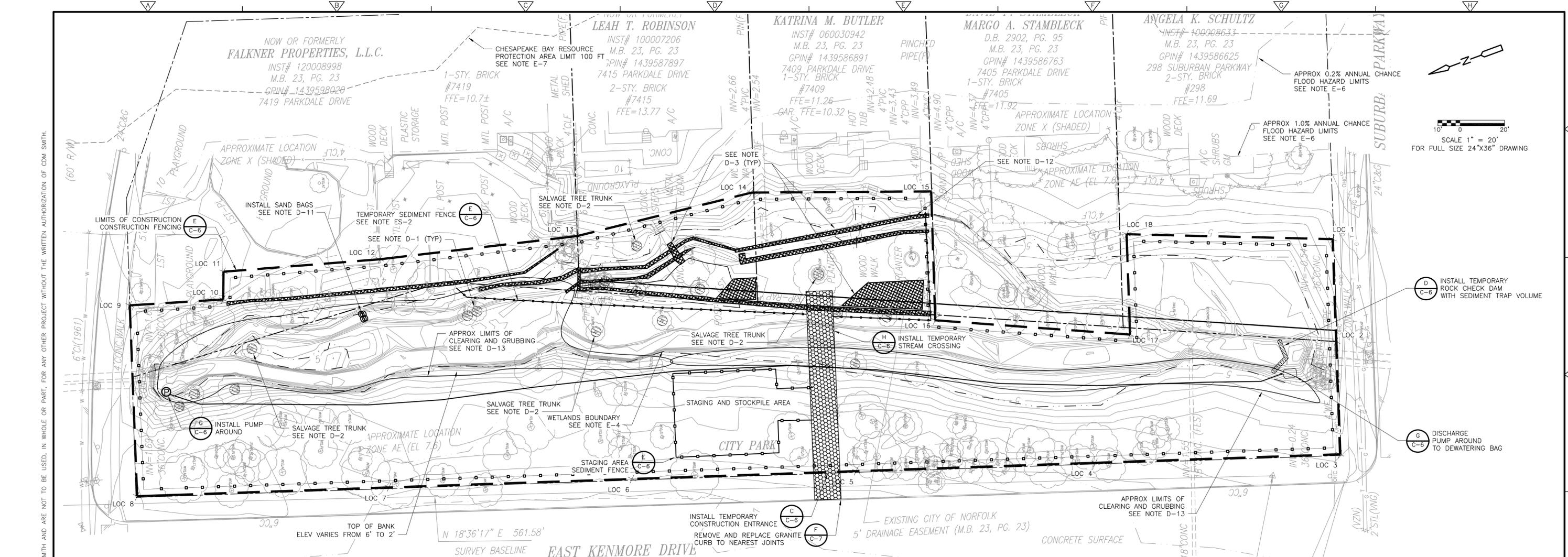
DESIGNED BY:	
DRAWN BY:	
SHEET CHK'D BY:	
CROSS CHK'D BY:	
APPROVED BY:	
DATE:	AUGUST 2015



CITY OF NORFOLK, VIRGINIA
DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

EXISTING SITE CONDITIONS

PROJECT NO. 1589-100395
FILE NAME: C001ASTPL.DWG
SHEET NO.
C-1A



SITE PLAN PLAN
1" = 20'

EXISTING CONDITIONS NOTES:

- E-1. SURVEY PREPARED BY PRECISION MEASUREMENTS, INC. 813 DILIGENCE DRIVE, SUITE 121-B, NEWPORT NEWS, VA 23606. TEL: (757) 595-7570. THE MERIDIAN SOURCE OF THIS TOPOGRAPHIC SURVEY IS BASED ON THE VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983 (1993). THE PROJECT MERIDIAN WAS ESTABLISHED USING GPS. ELEVATIONS REFER TO NAVD88 (92) AND WERE ESTABLISHED USING DIFFERENTIAL LEVELING METHODS INITIATED AT CITY OF NORFOLK CONTROL MONUMENT J2.
- E-2. LOCATIONS OF UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES.
- E-3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EXISTING TRASH OR DEBRIS FROM THE SITE AND PROPER DISPOSAL IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
- E-4. 404 JURISDICTIONAL WETLANDS ARE PRESENT ON THIS SITE WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN. THE RIPARIAN WETLANDS GENERALLY CORRESPOND WITH THE CORRIDOR OF THE STREAM CHANNEL. TWO UPLAND AREAS WITHIN THE WETLAND AREAS ARE SHOWN.
- E-5. SITE ACCESS SHALL BE GAINED AS NEEDED FROM THE PUBLIC RIGHT OF WAY AND THE CONTRACTOR IS RESPONSIBLE FOR FULL RESTORATION OF EXISTING CONDITIONS.
- E-6. MUCH OF THE CONSTRUCTION SITE IS WITHIN THE 1.0% ANNUAL CHANCE FLOOD HAZARD ZONE AS SHOWN ON FIRM 5101040060F PANEL 60/185 DATED SEPTEMBER 2, 2009.
- E-7. THE ENTIRE SITE IS WITHIN THE CHESAPEAKE BAY RESOURCE PROTECTION AREA DESIGNATED AS AN INTENSELY DEVELOPED AREA.

DEMOLITION AND SITE PREPARATION NOTES:

- D-1. VEGETATION REMOVAL REQUIRES PERMIT FROM CITY ENVIRONMENTAL SERVICES (757) 664-4751. TREES SHOWN SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ROOT SYSTEM. ALL OTHER TREES SHALL BE PROTECTED UNLESS APPROVED BY THE OWNER. ROOT PRUNING BY A VIRGINIA CERTIFIED ARBORIST IS REQUIRED PRIOR TO GRADING TO PROTECT REMAINING TREES. A TREE PERMIT SHALL BE ACQUIRED FROM THE CITY OF NORFOLK URBAN FORESTER PRIOR TO TREE REMOVAL AND PRUNING.
- D-2. SALVAGE AND STOCKPILE SELECT TREE TRUNKS IN 15 FT LENGTHS FROM THE THREE TREES IDENTIFIED ON PLAN SHEET C-1 FOR USE IN LOG VANES.
- D-3. DEMOLITION, REMOVAL, AND PROPER DISPOSAL OF EXISTING RETAINING WALL, RIPRAP, FENCE, AND MISCELLANEOUS STRUCTURES SHALL BE AS SHOWN. DRAIN PIPES SHALL REMAIN EXPOSED AND MARKED.
- D-4. ACCESS SHALL BE VIA THE PUBLIC RIGHT OF WAY ALONG EAST KENMORE DRIVE AT CONSTRUCTION ENTRANCE AS SHOWN ON C-1. ACCESS VIA VIRGINIAN AVENUE, OR SUBURBAN PARKWAY WITH PERMISSION OF CITY REPRESENTATIVE ONLY AND FULL RESTORATION OF EXISTING ROADWAY INFRASTRUCTURE AND SIDEWALKS.
- D-5. CONSTRUCTION SITE ON JURISDICTIONAL WETLANDS AS DELINEATED BY CDM SMITH IN 2012. SOIL COMPACTION SHALL BE LIMITED AS FEASIBLE IN AREAS WITHIN JURISDICTIONAL WETLANDS AS SHOWN ON C-1. HEAVY EQUIPMENT SHALL NOT TRANSIT OR BE STORED OVERNIGHT IN WETLAND AREAS.
- D-6. CITY PARK PROPERTY ON THE WEST SIDE OF STREAM CHANNEL MAY BE USED FOR STAGING AND ACCESS WITH EXCEPTION FOR TREE PROTECTION AREAS AS SHOWN.
- D-7. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL CONDUCT A VIDEOTAPED INSPECTION OF THE EXISTING CONDITIONS OF THE PROJECT PERIMETER. THE CONTRACTOR SHALL MAINTAIN THE PROJECT PERIMETER AND REPAIR/REPLACE AS REQUIRED TO MATCH CONDITIONS EXISTING PRIOR TO CONSTRUCTION.
- D-8. GRANITE CURB SHALL BE REMOVED TO NEAREST JOINT FOR TEMPORARY CONSTRUCTION. ACCESS FROM EAST KENMORE DRIVE, REPLACE CURB AND REPAIR ANY DAMAGED PAVEMENT AS REQUIRED TO MATCH EXISTING CONDITIONS PER CITY OF NORFOLK STANDARDS.
- D-9. REMOVE AND TRANSPORT SOILS IN A MANNER THAT WILL PREVENT SPILLAGE ON PAVEMENTS, STREETS, OR ADJACENT AREA. CLEAN UP SPILLAGE FROM PAVEMENTS, STREETS, AND ADJACENT AREAS.
- D-10. MAINTAIN AT LEAST ONE LANE OF TRAFFIC FLOW ON ALL STREETS THROUGHOUT CONSTRUCTION.
- D-11. SAND BAGS SHALL BE USED TO BLOCK POTENTIAL STORMWATER FLOW TO EAST CHANNEL DURING DEMOLITION OF RETAINING WALL.
- D-12. RETAINING WALL FOR DEMOLITION SHALL BE CUT TO SEPARATE FROM REMAINING WALL.
- D-13. CLEARING AND GRUBBING AS REQUIRED FOR GRADING ONLY, NOT ALL ROOTS MUST BE REMOVED.

EROSION CONTROL NOTES:

- ES-1. EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION ON GENERAL NOTES SHEET G-1.
- ES-2. TEMPORARY SILT FENCE DURING DEMOLITION TO BE REMOVED WHEN GRADING CHANNEL.

TABLE 1. TREES FOR REMOVAL

TREE TYPE	DBH (INCHES)	QUANTITY
TREE	<6	6
TREE	6	3
TREE	8	1
TREE	10	1
TREE	12	1
OAK	10	1
GUM	18	2
WILLOW	20	1
OAK	24	1
MAPLE	24	1
MAPLE	36	1
TOTAL		19

LIMITS OF CONSTRUCTION

POINT NO.	NORTHING	EASTING
1	3498603.66	12135647.54
2	3498617.87	12135603.83
3	3498633.47	12135555.77
4	3498738.27	12135589.86
5	3498840.67	12135623.16
6	3498936.62	12135654.35
7	3499040.67	12135688.18
8	3499148.51	12135723.24
9	3499122.39	12135804.76
10	3499081.94	12135792.85
11	3499077.56	12135804.49
12	3499009.54	12135785.66
13	3498922.54	12135765.07
14	3498842.16	12135756.53
15	3498766.05	12135729.38
16	3498784.09	12135674.51
17	3498703.92	12135638.53
18	3498689.98	12135681.30

- EROSION CONTROL AND DEMOLITION LEGEND**
- CHESAPEAKE BAY RPA
 - o--- SEDIMENT FENCE
 - - - - - WETLAND BOUNDARY
 - LIMITS OF CONSTRUCTION
 - CLEARING AND GRUBBING LIMITS
 - ⊗ TREE REMOVAL
 - ⊗ DEMOLITION
 - ⊗ TEMPORARY STONE CONSTRUCTION ROAD
 - ⊗ DEWATERING PUMP

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: M. BROKAW
 CROSS CHK'D BY:
 APPROVED BY: R. HOPPER
 DATE: JUNE 2015

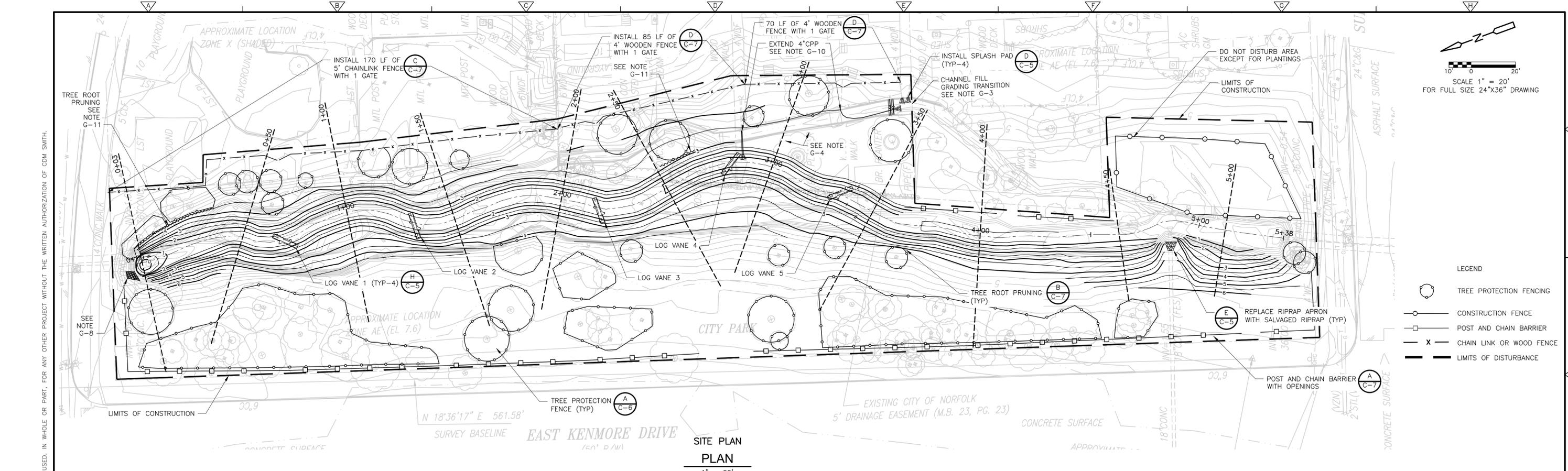


CITY OF NORFOLK, VIRGINIA
 DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

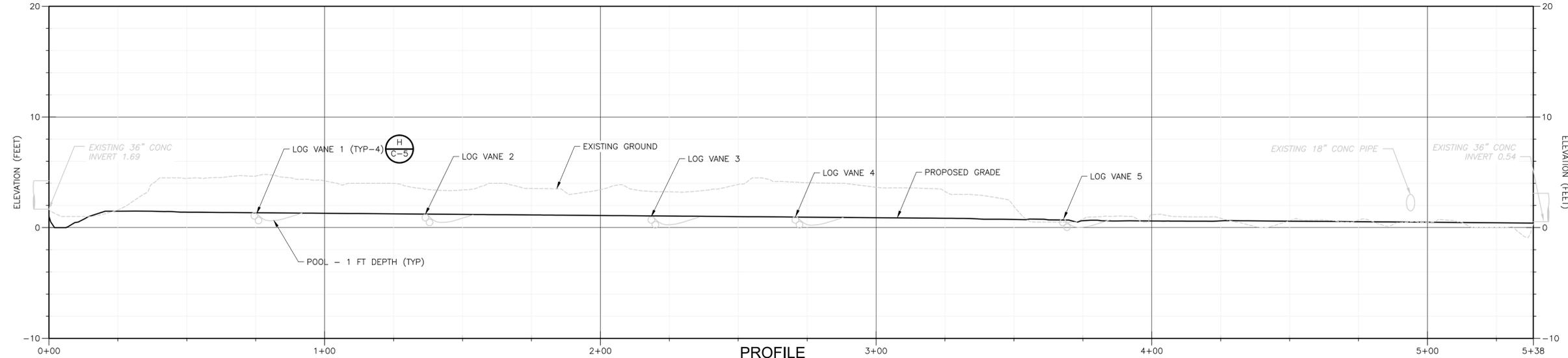
EROSION CONTROL AND DEMOLITION PLAN
 SHEET NO. **C-1**

PROJECT NO. 1589-100395
 FILE NAME: C001STPL.DWG
 SHEET NO. **C-1**





SITE PLAN
1" = 20'



PROFILE
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

GRADING PLAN NOTES

- G-1. GRADE AS REQUIRED TO OBTAIN CONTOUR ELEVATIONS AS SHOWN WITH RESPECT TO NAVD 88 AND CHANNEL DIMENSIONS WITH SIDE SLOPES AS SHOWN IN TYPICAL SECTION DETAIL F ON SHEET C-5.
- G-2. TO ESTABLISH PROPER GRADES WITHIN TOLERANCE OF 0.2 FT THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF GRADE STAKES. CONTRACTOR SHALL BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE OWNER AND THE ENGINEER.
- G-3. FILL EXISTING CHANNEL AS SHOWN ON GRADING PLAN AND SECTIONS AT MAXIMUM 3H:1V SLOPE FROM EXISTING GRADE. EXTEND 4 INCH DRAIN LINES AS SHOWN. TRANSITION FILL OF CHANNEL AND GRADING TO MEET EXISTING DITCH GRADE WITHIN 5 FEET OF LIMITS OF DISTURBANCE AS SHOWN.
- G-4. EXCAVATE FLOODPLAIN AREA TO DRAIN WITH MINIMUM 2 PERCENT SLOPE TOWARD NEW CHANNEL.
- G-5. EXCESS SOIL MATERIALS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THEIR EXPENSE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND AS SPECIFIED.
- G-6. ALL AREAS DISTURBED OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE IN A MANNER APPROVED BY THE ENGINEER. AREAS OF THE ASPHALT ROAD, CONCRETE SIDEWALK, CONCRETE DRIVEWAYS, ETC. REMOVED OR DAMAGED DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPAIRED IN ACCORDANCE WITH CITY OF NORFOLK STANDARDS.
- G-7. INSTALL OR REPLACE CHAIN LINK AND WOOD FENCES WITH GATES AS EXISTING OR AS SHOWN FOR NEW FENCE. GATES SHOWN AS BREAK IN FENCE LINE.
- G-8. INSTALL 2.5' THICK LAYER OF VDOT CLASS 1 RIPRAP UNDERLAIN WITH 8 OZ NONWOVEN GEOTEXTILE FABRIC AS SHOWN IN VOID ADJACENT TO 36" RCP END.
- G-9. DATUM IS NAVD88.

GRADING PLAN NOTES

- G-10. EXTEND 3 LENGTHS OF 4" CPP DRAIN TO DISCHARGE AT NEW ELEVATION WITH MINIMUM SLOPE OF 0.004 FT/FT. PIPE BEDDING IS SHOWN ON DETAIL FOR SHEET C-6.
- G-11. PRUNE TREE ROOTS WHERE GRADING WILL INTERSECT DRIP LINE PER DETAILS ON SHEET C-7 AND CITY ARBORIST DIRECTIONS. TREES TO REMAIN IN FILL AREAS SHALL BE GRADED AROUND. NO FILL SHALL BE PLACED WITHIN TREE DRIP LINE.

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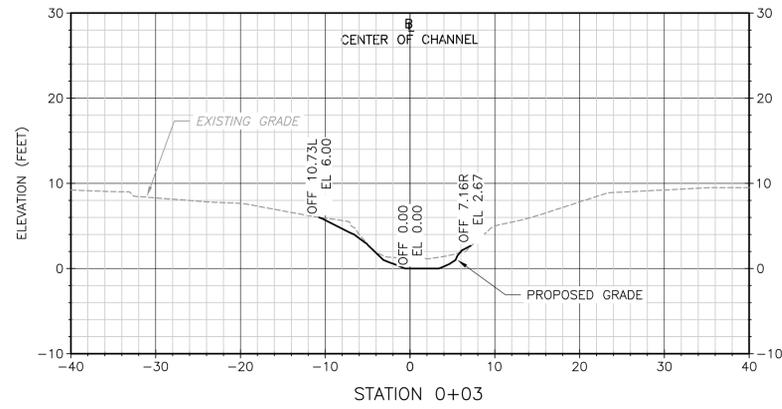
DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: Y. BANGOLAME
 CROSS CHK'D BY: R. HOPPER
 APPROVED BY: R. HOPPER
 DATE: AUGUST 2015

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 5700 Thurston Avenue, Suite 102
 Virginia Beach, VA 23455
 Tel: (757) 319-9900

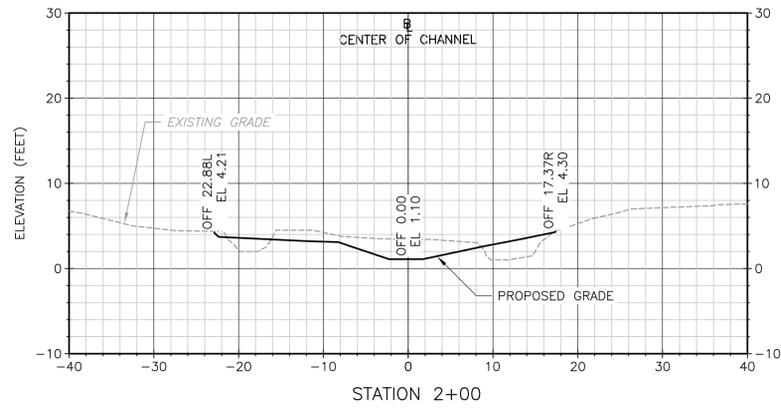
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 DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

PROPOSED GRADING PLAN
 SHEET NO. **C-2**

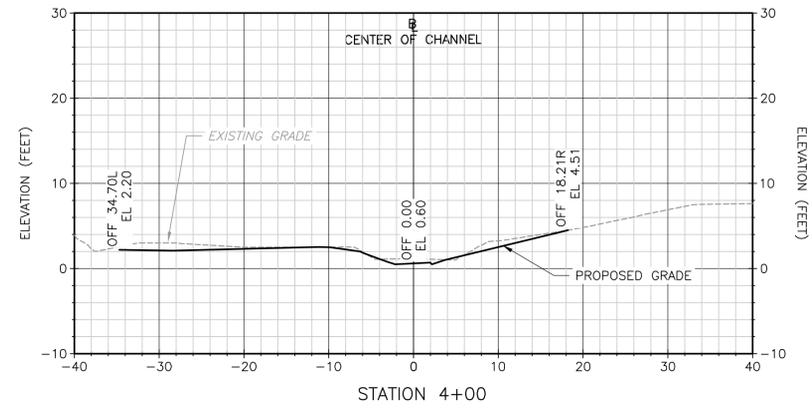
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 FILE NAME: C0025TPL.DWG
 SHEET NO. **C-2**



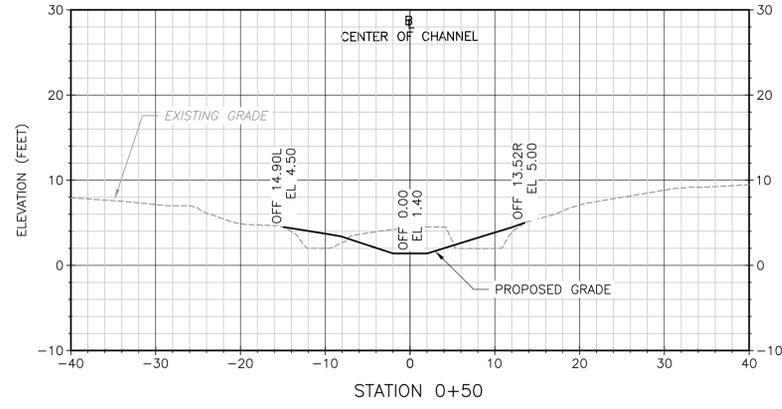
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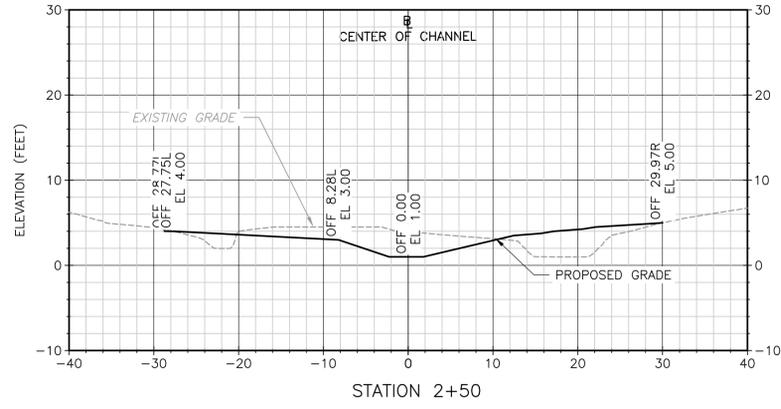
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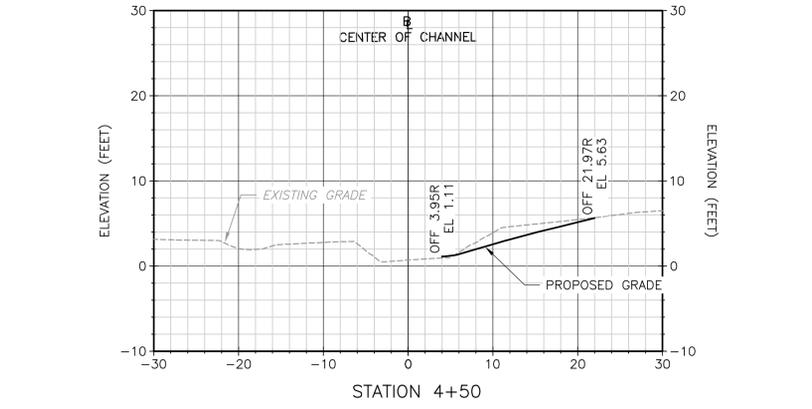
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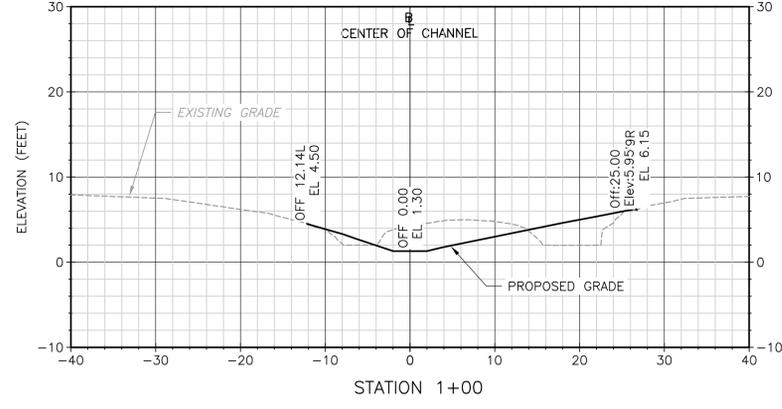
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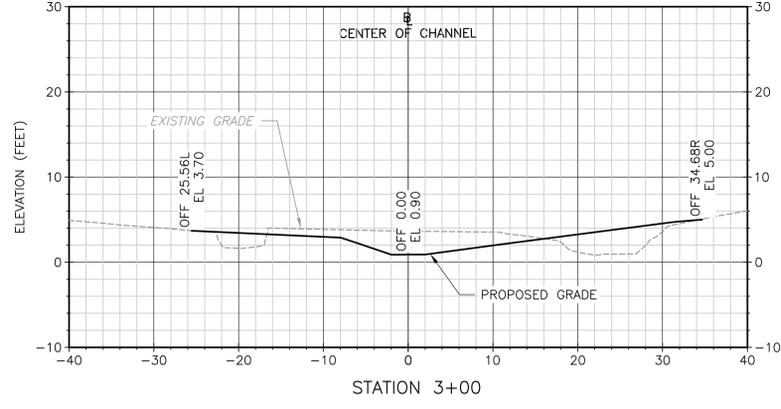
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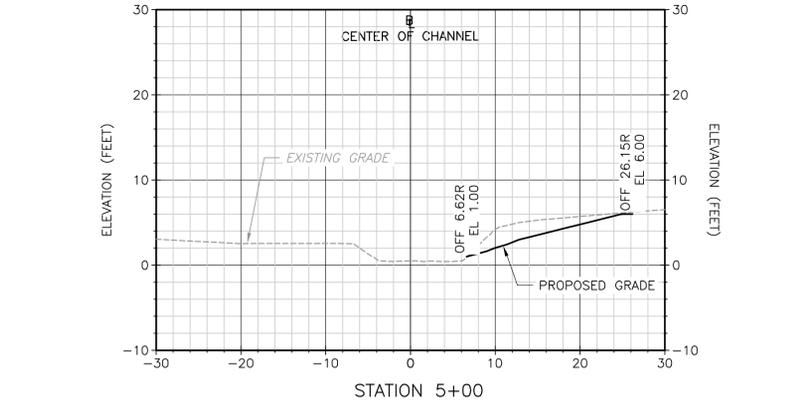
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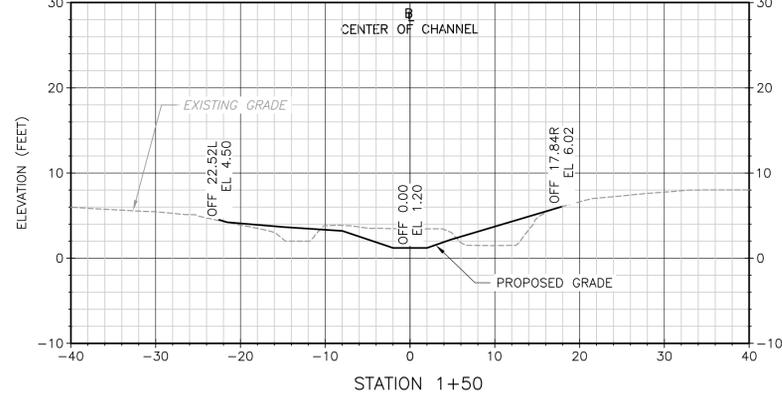
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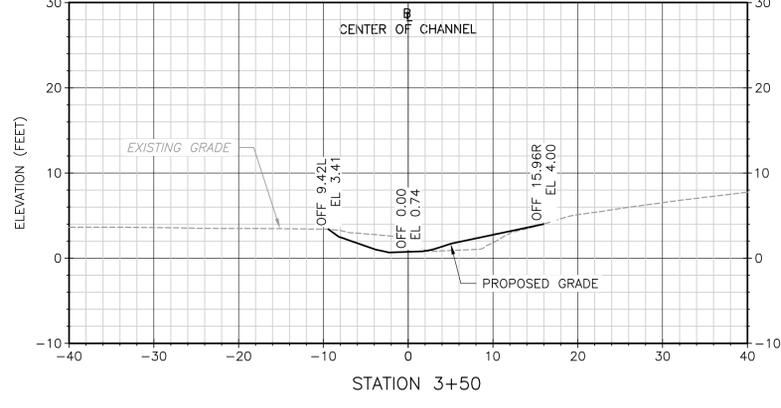
STATION 3+00



STATION 5+00



STATION 1+50



STATION 3+50

NOTES:
1. SECTIONS ARE FACING DOWNSTREAM AND ORIENTED AS SHOWN ON SHEET C-2.

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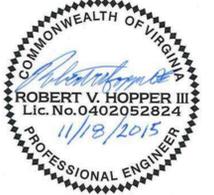
DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: M. BROKAW
 CROSS CHK'D BY: M. BROKAW
 APPROVED BY: R. HOPPER
 DATE: JUNE 2015

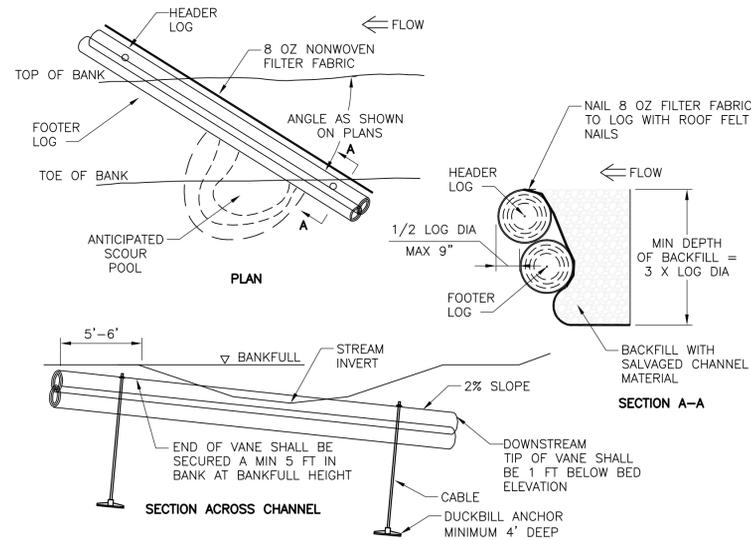
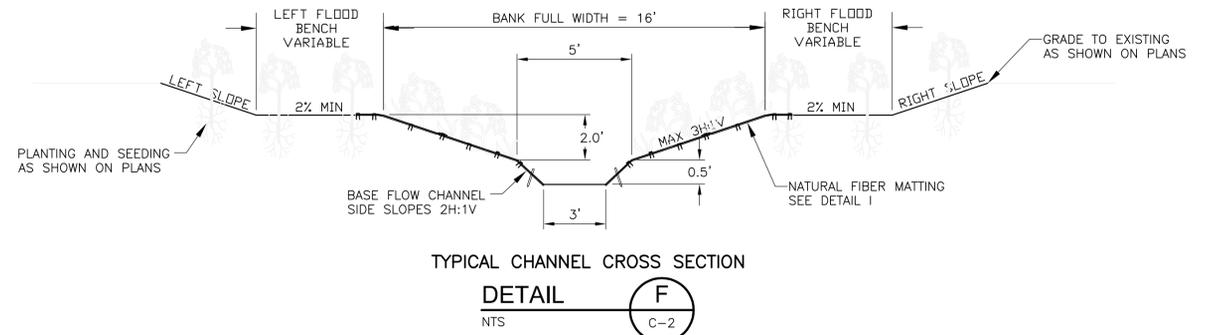
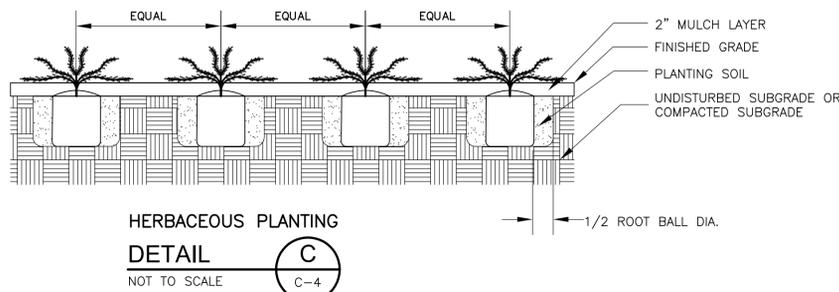
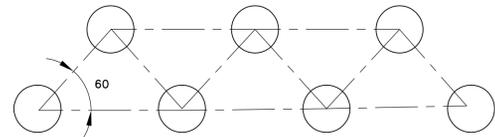
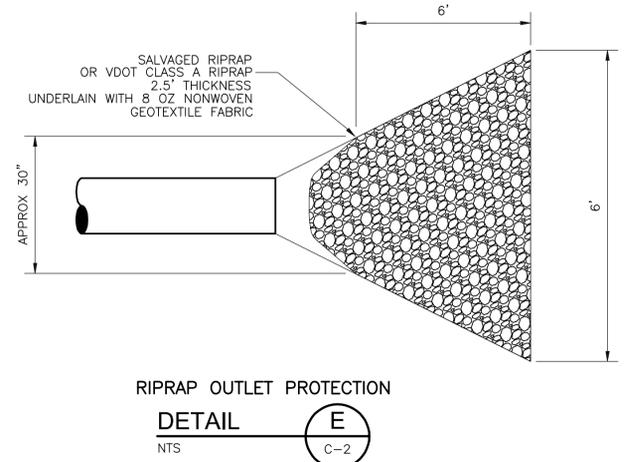
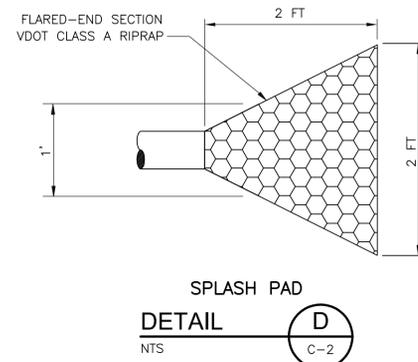
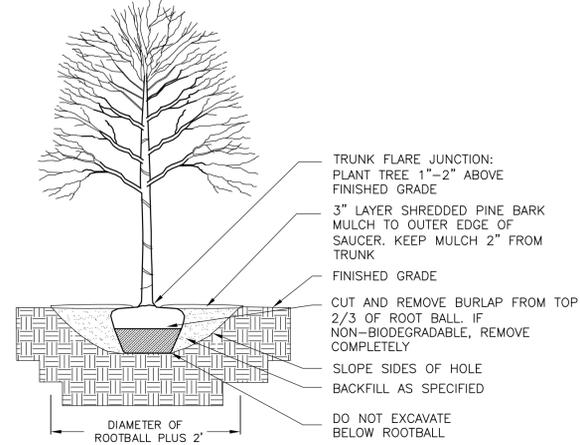
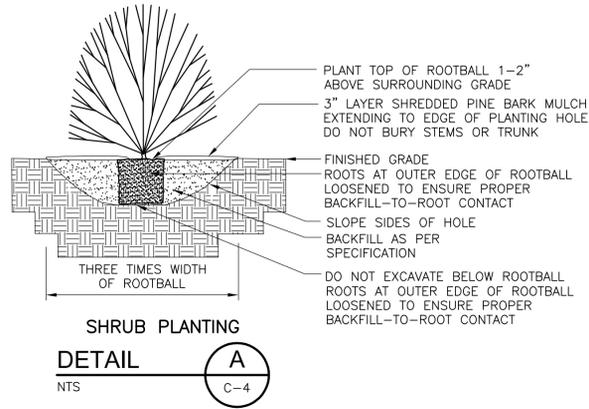


CITY OF NORFOLK, VIRGINIA
 DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

PROPOSED SECTIONS

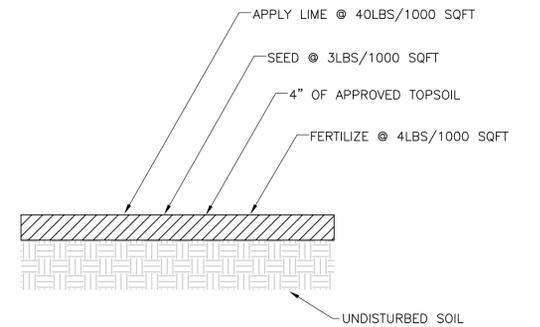
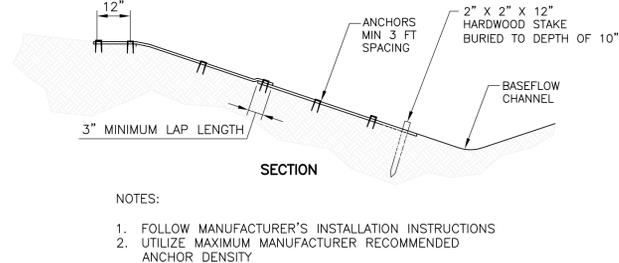
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 FILE NAME: C003STCS.DWG
 SHEET NO. **C-3**



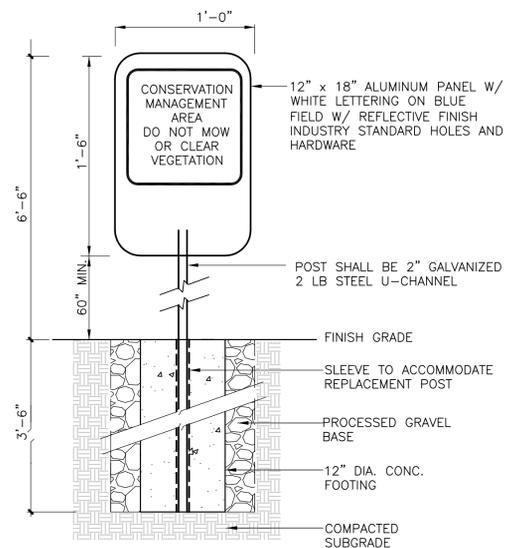


LOG VANE SCHEDULE

STRUCTURE	STATION	CENTERLINE PROFILE AT ELEVATION	BANKFULL WIDTH	1/3 BANKFULL WIDTH	BANKFULL DEPTH
LV1	0+75	1.35	15.5	5.17	2.0
LV2	1+37	1.25	15.5	5.17	2.0
LV3	2+20	1.05	15.5	5.17	2.0
LV4	2+70	0.95	15.5	5.17	2.0
LV5	3+60	0.80	15.5	5.17	2.0



- SEEDING NOTES:**
- UNDISTURBED SOILS SHALL BE TILLED TO A DEPTH OF 3 INCHES PRIOR TO THE PLACEMENT OF APPROVED TOPSOIL.
 - LIME SHALL BE FINELY GROUND DOLOMITIC AGRICULTURAL LIMESTONE CONTAINING AT LEAST 85% OF TOTAL CARBONATES.
 - FERTILIZER SHALL BE 13-25-12 FORMULA & SHALL CONFORM TO VDOT STANDARDS.
 - AFTER SEEDING, THE AREA SHALL BE RAKED, ROLLED, WATERED AND MULCHED AS SPECIFIED.
 - THE CONTRACTOR SHALL MAINTAIN ALL GRASSED AREAS TO PROVIDE FOR A SMOOTH UNIFORM TURF UPON COMPLETION OF THE CONTRACT.



- SIGN NOTES:**
- THE SIGN SHALL BE 12" BY 18" MANUFACTURED FROM 0.080" COATED ALUMINUM.
 - ALL LETTERING SHALL BE 2" IN HEIGHT. FONT SHALL BE ROMANS.
 - SIGNS SHALL BE POSTED AS SHOWN ON PLANS WITH WORDS FACING AWAY FROM THE STREAM.
 - SIGNS SHALL BE POSTED AT LEAST 4" HIGH AND NOT MORE THAN 6" TALL.
 - SIGNS SHALL BE ATTACHED TO THE POSTS WITH A MINIMUM 2 STAINLESS STEEL LAG BOLTS (0.25" DIAMETER X 1.5" LONG) AND 2 STAINLESS STEEL FLAT WASHERS.

CONSERVATION EASEMENT SIGN
DETAIL G
NTS C-4

LOG VANE (LV)
DETAIL H
NTS C-2

NATURAL FIBER MATTING
DETAIL I
NTS C-4

SEEDING
DETAIL J
NTS C-4



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CITY OF NORFOLK, VIRGINIA
DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

DETAILS

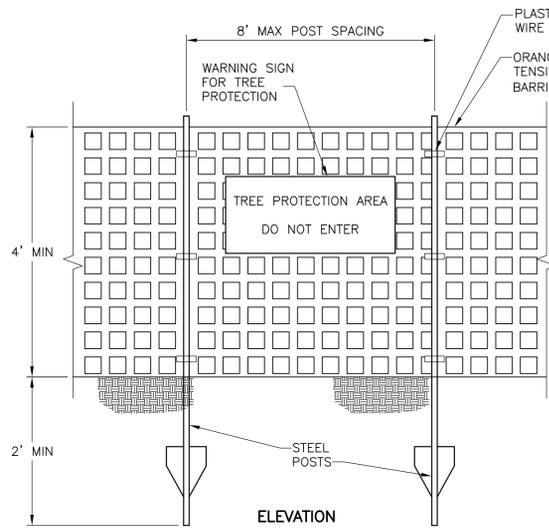
PROJECT NO. 1589-100395
FILE NAME: CO05STD1.DWG

SHEET NO.

C-5

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY:	R. HOPPER
DRAWN BY:	M. KOSKI
SHEET CHK'D BY:	M. BROKAW
CROSS CHK'D BY:	
APPROVED BY:	R. HOPPER
DATE:	AUGUST 2015

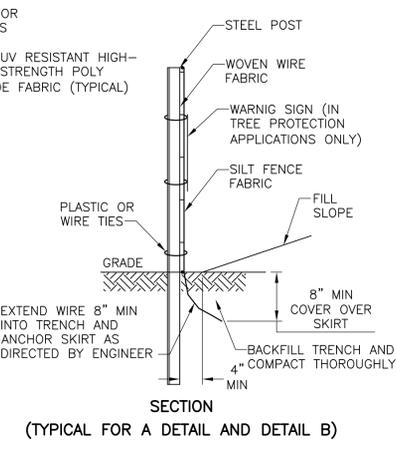


TREE PROTECTION NOTES:

1. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
2. LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.
4. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
5. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
8. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF RALEIGH INSPECTIONS DEPARTMENT BASED ON ACTUAL FIELD CONDITIONS.

CONSTRUCTION AND TREE PROTECTION FENCE

DETAIL A
NTS C-1

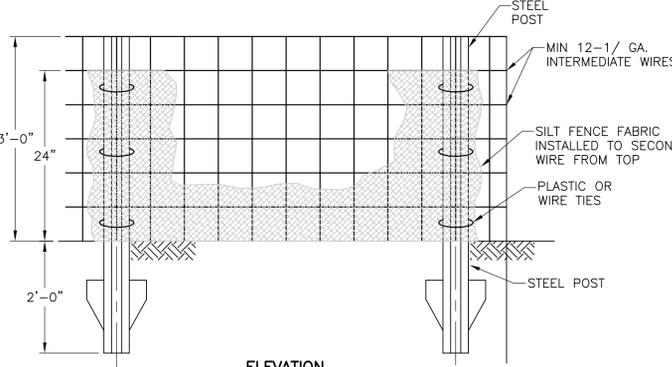


NOTES:

1. THE DEWATERING BAG SHALL BE MADE OF NON-WOVEN GEOTEXTILE WITH A MIN. SURFACE AREA OF 225 SQUARE FEET PER SIDE.
2. ALL STRUCTURAL SEAMS SHALL BE SEWN WITH A DOUBLE STITCH USING A DOUBLE NEEDLE MACHINE WITH HIGH STRENGTH THREAD.
3. THE SEAM STRENGTH SHALL WITHSTAND 100 LB/IN USING ASTM D-4884 TEST METHOD.
4. THE GEOTEXTILE FABRIC SHALL BE A 10 OZ NON-WOVEN FABRIC.
5. DISCHARGE FROM THE DEWATERING BAG SHALL BE DIRECTED SUCH THAT PRE-DISTURBANCE HYDROLOGY IS NOT CHANGED.
6. SECURE DEWATERING BAG IN PLACE WITH STAKES AND ROPE TO AVOID ROLLING.

DEWATERING BAG

DETAIL B
NTS C-1

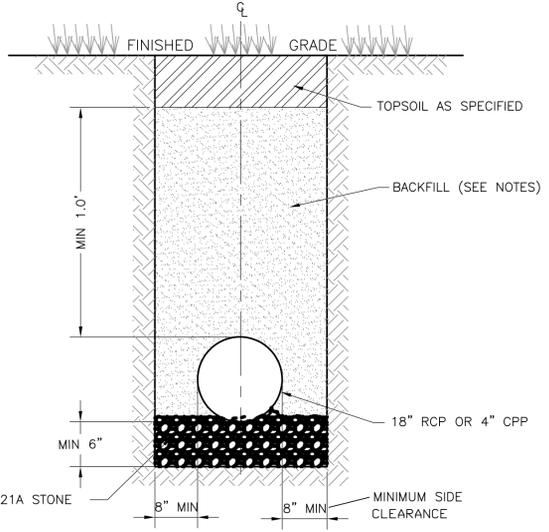


SEDIMENT FENCE NOTES:

1. SEDIMENT FENCES SHALL BE POSITIONED AS INDICATED ON THE DRAWINGS AND AS NECESSARY TO PREVENT OFF SITE MOVEMENT OF SEDIMENT PRODUCED BY CONSTRUCTION ACTIVITIES AS DIRECTED BY THE ENGINEER.
2. DIG TRENCH APPROXIMATELY 4" IN WIDE AND 8" IN DEEP ALONG PROPOSED FENCE LINES AND UPSLOPE FROM THE BARRIER.
3. DRIVE STAKES, 8'-FT ON CENTER (MAXIMUM) AT BACK EDGE OF TRENCHES. STAKES SHALL BE DRIVEN 2'-FT (MINIMUM) INTO GROUND.
4. HANG FILTER FABRIC ON POSTS CARRYING TO BOTTOM OF TRENCH WITH 12" IN OF FABRIC LAID ACROSS BOTTOM AND SIDE OF TRENCH. STRETCH FABRIC FAIRLY TAUT ALONG FENCE LENGTH AND MAINTAIN SECURE BOTH WAYS.
5. SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST.
6. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHALL BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
7. BACKFILL TRENCH WITH EXCAVATED MATERIAL AND TAMP THOROUGHLY.
8. INSTALL PRE-FABRICATED SILT FENCE ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
9. THE HEIGHT OF THE SEDIMENT FENCE SHALL NOT EXCEED 24 INCHES ABOVE THE GROUND SURFACE.
10. THE FABRIC SHALL BE CONSTRUCTED FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
11. SEDIMENT FENCE SHALL NOT BE ATTACHED TO TREES.
12. END OF SILT FENCE SHALL BE TURNED UPHILL.

SEDIMENT FENCE

DETAIL E
NTS C-1

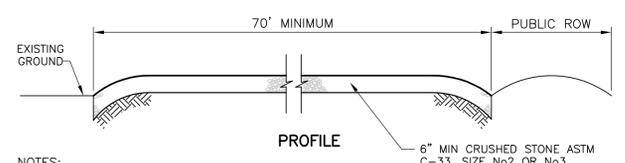
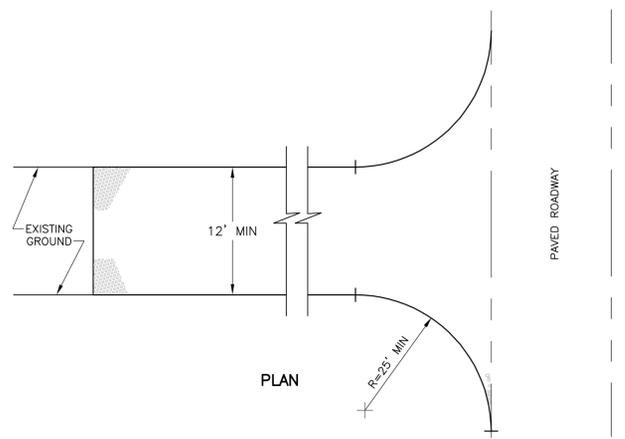


DETAIL NOTES:

1. BACKFILL MATERIAL SHALL BE SELECT MATERIAL, PER VDOT ROAD AND BRIDGE SPECIFICATIONS, SECTION 207, TYPE I AND 20 CBR COMPACTION.
2. BEDDING SHALL IN ACCORDANCE WITH VDOT ROAD AND BRIDGE SPECIFICATIONS, SECTION 208.
3. BACKFILL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR (ASTM D-693).

PIPE TRENCH

DETAIL F
NTS C-2

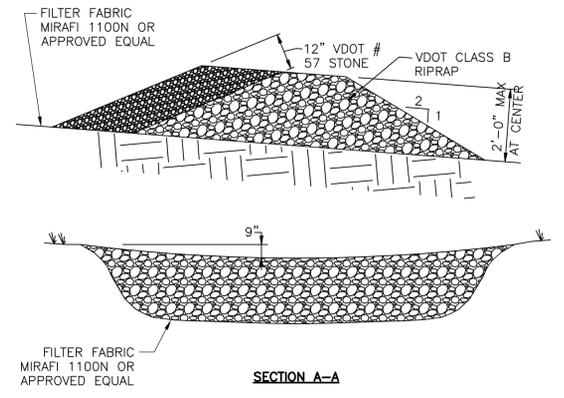


NOTES:

- A. 2" TO 3" VDOT NO. 57 STONE SHALL BE USED.
- B. PROVIDE TURNING RADII SUFFICIENT TO ACCOMMODATE LARGER TRUCKS.
- C. ENTRANCE(S) MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT SOIL TRACKING OR DIRECT FLOW ONTO STREETS.
- D. PERIODIC TOP DRESSING WITH STONE WILL BE NECESSARY. KEEP SOME ON HAND. ANY MATERIAL WHICH STILL MAKES IT ONTO THE ROAD MUST BE CLEANED IMMEDIATELY.
- E. CONTRACTOR MUST PROVIDE TIRE WASHING STATION AT EVERY CONSTRUCTION ENTRANCE AND CLEAN THE TIRES OF EVERY VEHICLE BEFORE EXITING CONSTRUCTION SITE TO PUBLIC ROAD TO PREVENT TRACKING OF MATERIAL ON PUBLIC ROADS. CONTRACTOR MUST SUBMIT PLAN TO OWNER AND ENGINEER FOR APPROVAL AND MUST INCLUDE METHOD OF CONTROLLING AND CAPTURING SEDIMENT FROM WASH WATER.
- G. REMOVE AND REPLACE CURB AND GUTTER TO MATCH EXISTING AT EACH CONSTRUCTION ENTRANCE TO THE LIMITS SHOWN, INCLUDING ANY ADDITIONAL CURB AND GUTTER DISTURBED BY THE WORK.

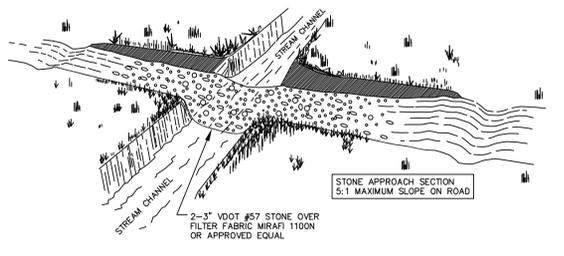
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

DETAIL C
NTS C-1



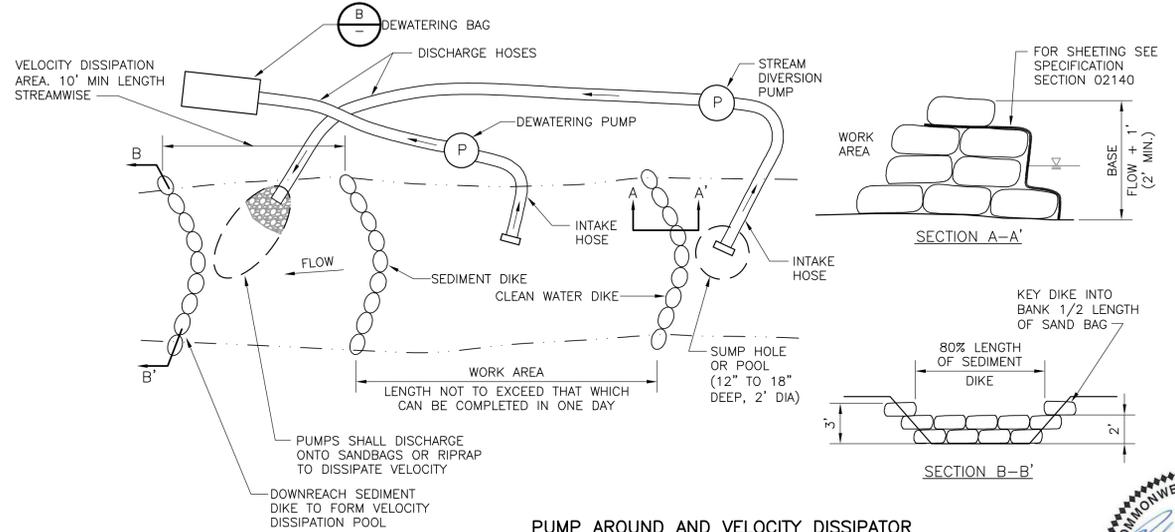
TEMPORARY ROCK CHECK DAM

DETAIL D
NTS C-1



TEMPORARY STREAM CROSSING

DETAIL H
NTS C-1



PUMP AROUND AND VELOCITY DISSIPATOR

DETAIL G
NTS C-1



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: M. BROKAW
 CROSS CHK'D BY: R. HOPPER
 APPROVED BY: R. HOPPER
 DATE: JUNE 2015

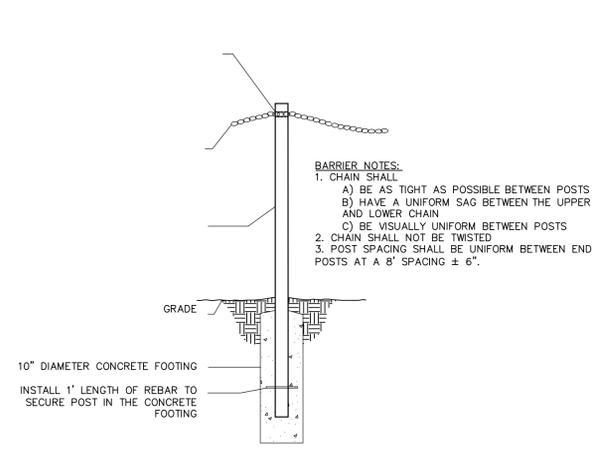


CITY OF NORFOLK, VIRGINIA
 DEPARTMENT OF PUBLIC WORKS
 PARKDALE CHANNEL IMPROVEMENTS

EROSION AND SEDIMENTATION
 CONTROL DETAILS

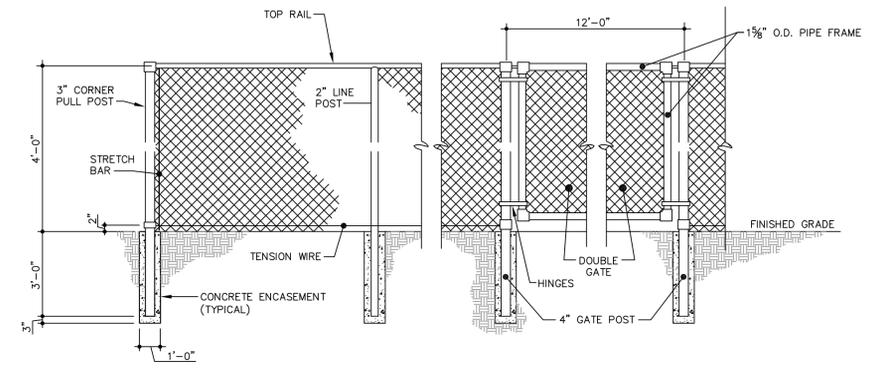
PROJECT NO. 1589-100395
 FILE NAME: C0065STD.DWG
 SHEET NO. C-6

XREFs: [CDWS_2336, CDWS_2234] Images: [esntan 9, Norfolk Public Utilities Manual 70, VA PE Seal Lic No 0402, ROBOPPER.jpg]
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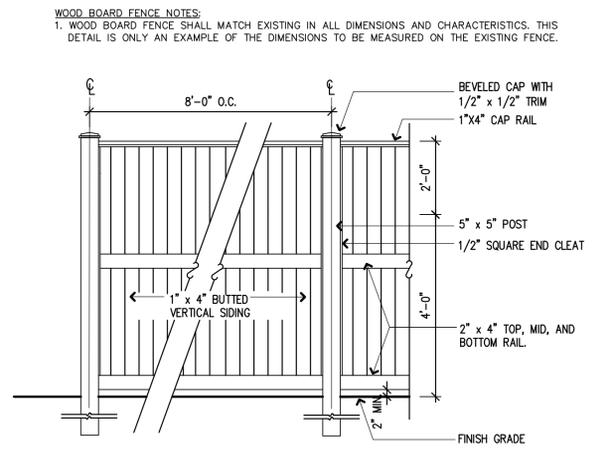
BARRIER NOTES:
 1. CHAIN SHALL:
 A) BE AS TIGHT AS POSSIBLE BETWEEN POSTS
 B) HAVE A UNIFORM SAG BETWEEN THE UPPER AND LOWER CHAIN
 C) BE VISUALLY UNIFORM BETWEEN POSTS
 2. CHAIN SHALL NOT BE TWISTED
 3. POST SPACING SHALL BE UNIFORM BETWEEN END POSTS AT A 6' SPACING ± 6".

WOOD POST AND CHAIN BARRIER
 DETAIL **A**
 NTS C-2



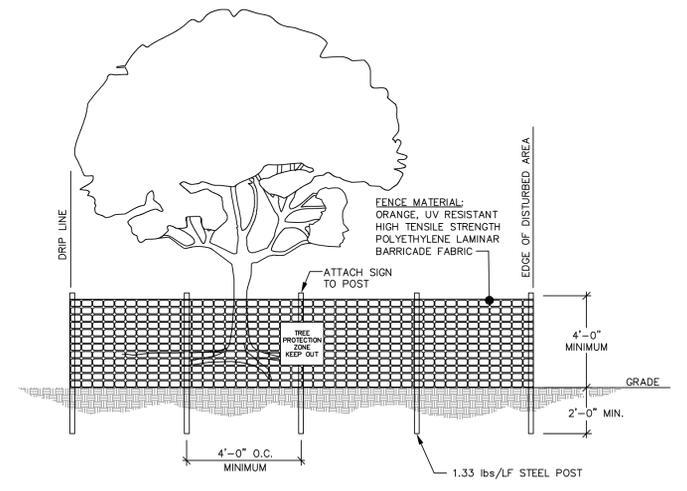
CHAIN LINK FENCE NOTES:
 1. DOUBLE GATE SHALL HAVE A LOCKING MECHANISM, DROP ROD, AND TRUSS ROD.
 2. ALL FENCE COMPONENT MATERIALS SHALL BE EITHER HOT DIPPED GALVANIZED STEEL OR IRON. FENCE FABRIC SHALL BE ALUMINUM COATED.

4 FT TALL CHAIN LINK FENCE AND GATE
 DETAIL **C**
 NTS C-2



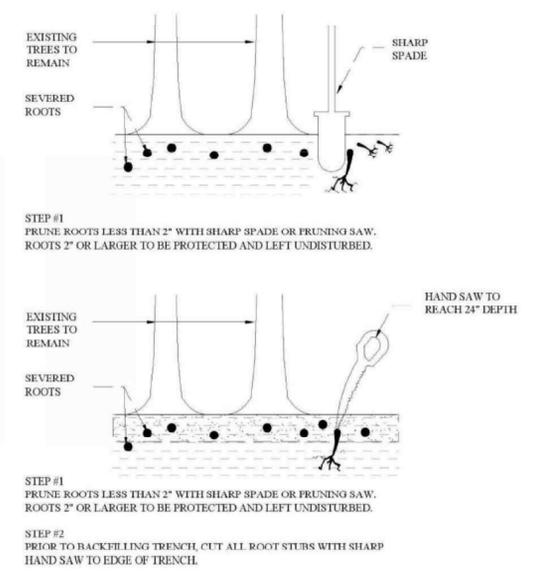
WOOD BOARD FENCE NOTES:
 1. WOOD BOARD FENCE SHALL MATCH EXISTING IN ALL DIMENSIONS AND CHARACTERISTICS. THIS DETAIL IS ONLY AN EXAMPLE OF THE DIMENSIONS TO BE MEASURED ON THE EXISTING FENCE.

4 FT TALL WOOD BOARD FENCE
 DETAIL **D**
 NTS C-2



TREE PROTECTION FENCE NOTES:
 1. ALL PLANTS DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING, AS ILLUSTRATED.
 2. INSTALL TREE PROTECTION FENCE AT TREE DRIP LINE OR AT EDGE OF DISTURBED AREA, AS SHOWN ON PLANS, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 3. SPACE TREE PROTECTION ZONE SIGNS A MINIMUM OF ONE EVERY 300 FEET. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE. THE SIGN MUST CONTAIN THE FOLLOWING LANGUAGE IN BOTH ENGLISH & SPANISH: "TREE PROTECTION ZONE, KEEP OUT".
 3. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
 4. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

TREE PROTECTION
 DETAIL **E**
 NTS C-1

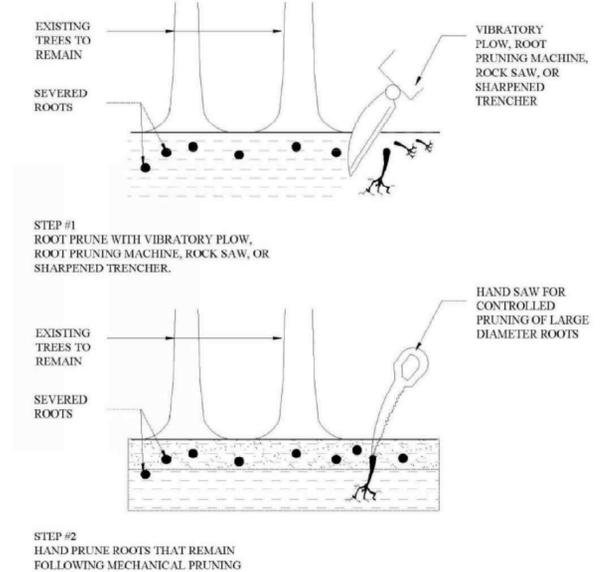


STEP #1
 PRUNE ROOTS LESS THAN 2" WITH SHARP SPADE OR PRUNING SAW. ROOTS 2" OR LARGER TO BE PROTECTED AND LEFT UNDISTURBED.

STEP #1
 PRUNE ROOTS LESS THAN 2" WITH SHARP SPADE OR PRUNING SAW. ROOTS 2" OR LARGER TO BE PROTECTED AND LEFT UNDISTURBED.

STEP #2
 PRIOR TO BACKFILLING TRENCH, CUT ALL ROOT STUBS WITH SHARP HAND SAW TO EDGE OF TRENCH.

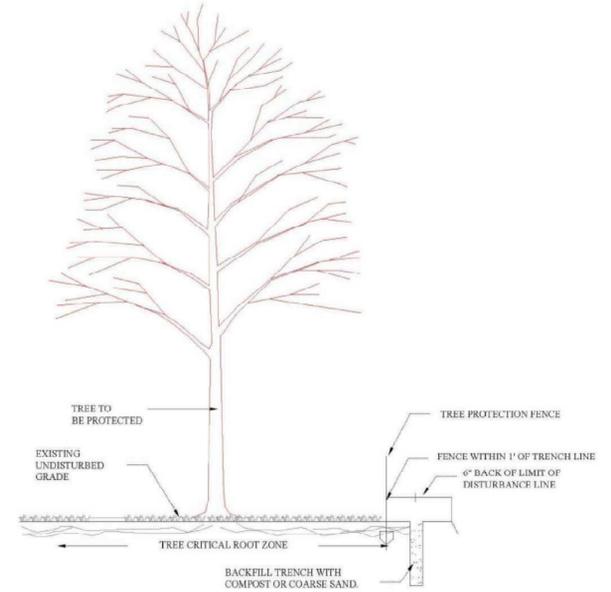
ROOT PRUNE HAND
 NO SCALE



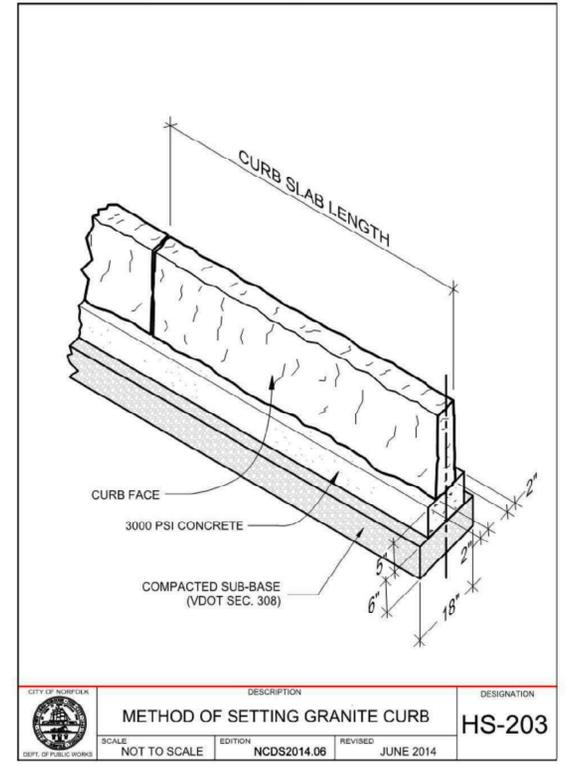
STEP #1
 ROOT PRUNE WITH VIBRATORY PLOW, ROOT PRUNING MACHINE, ROCK SAW, OR SHARPENED TRENCHER.

STEP #2
 HAND PRUNE ROOTS THAT REMAIN FOLLOWING MECHANICAL PRUNING.

ROOT PRUNE MECHANICAL
 NO SCALE

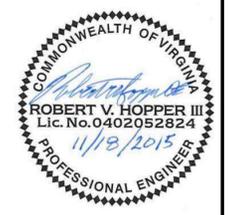


ROOT PRUNING
 NO SCALE



CITY OF NORFOLK DEPT. OF PUBLIC WORKS	DESCRIPTION METHOD OF SETTING GRANITE CURB	DESIGNATION HS-203
SCALE NOT TO SCALE	EDITION NCDS2014.06	REVISION JUNE 2014

GRANITE CURB REPLACEMENT
 DETAIL **F**
 NTS C-1



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. HOPPER
 DRAWN BY: M. KOSKI
 SHEET CHK'D BY: Y. BANGALOME
 CROSS CHK'D BY: R. HOPPER
 APPROVED BY: R. HOPPER
 DATE: JUNE 2015

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CITY OF NORFOLK, VIRGINIA
 DEPARTMENT OF PUBLIC WORKS
PARKDALE CHANNEL IMPROVEMENTS

DETAILS II
 PROJECT NO. 1589-100395
 FILE NAME: C007STD1.DWG
 SHEET NO. **C-7**